From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, November 6, 2018 7:15:40 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Accepted: Case 21 sync (Conference Call) Attachments: meeting.ics (1.36 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Monday, April 30, 2018 5:05:23 PM To: Livingood, Jason <Jason_Livingood@comcast.com>; Hook, Lisa <lisa.hook@team.neustar>; Matt.Carothers@cox.com CC: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: DARPA D60 event

Many thanks Angele!

Jason, Matt and Lisa. Please see inline message from Angelos. If you want to attend the (invitation only) DARPA D60 event (<u>https://www.darpa.mil/about-us/d60-about</u>), please go ahead and register.

This is a way for Angelos (and DARPA) to show you their appreciation for helping GT out in our research, I suspect. :)

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Monday, April 30, 2018 11:49 AM To: Antonakakis, Manos Subject: Comcast, Cox, and Neustar

I don't have their contact info, so please pass along my invitation to the DARPA 60th anniversary celebration in early September. They should register ASAP at:

https://www.darpa.mil/about-us/d60-about

If they need to list a sponsor, use me. -Angelos From:Keromytis, Angelos<angelos.keromytis@darpa.mil>Sent on:Monday, April 30, 2018 3:49:12 PMTo:Manos Antonakakis<manos@gatech.edu>Signed by:KEROMYTIS.ANGELOS.D.1501999799 on Monday, April 30, 2018 3:49:12 PMSubject:Comcast, Cox, and Lisa (Neustar)Attachments: Nameless.txt (260 Bytes)

I don't have their contact info, so please pass along my invitation to the DARPA 60th anniversary celebration in early September. They should register ASAP at:

https://www.darpa.mil/about-us/d60-about

If they need to list a sponsor, use me. -Angelos My tour at DARPA ended on 20 December, 2018. For matters relating to programs I previously managed, please contact the following SETAs:

- AA, WASH: Susan Kloss (susan.kloss.ctr@darpa.mil<mailto:susan.kloss.ctr@darpa.mil>)

- ACD, ADAMS: Dan Adams (daniel.adams.ctr@darpa.mil<mailto:daniel.adams.ctr@darpa.mil>)
- EA: Chris Schneck (christopher.schneck@darpa.mil<mailto:christopher.schneck@darpa.mil>)
- HACCS: Alison Kline (alison.kline.ctr@darpa.mil<mailto:alison.kline.ctr@darpa.mil>)
- TC, LADS: Mary Denz (mary.denz.ctr@darpa.mil<mailto:mary.denz.ctr@darpa.mil>)

For non-DARPA matters, you may contact me at angelos@gatech.edu<mailto:angelos@gatech.edu>

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, January 4, 2018 8:49:31 PM To: The second secon

https://carnegieendowment.org/2018/01/04/iran-s-cyber-threat-espionage-sabotage-and-revenges-pub-75134

From:	Keromytis, Angelos <angelos.keromytis@darpa.mil></angelos.keromytis@darpa.mil>	
Sent on:	Thursday, November 2, 2017 5:49:01 PM	
To:	manos@gatech.edu;	
CC:	Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil></tejas.patel.ctr@darpa.mil>	
Signed by:	KEROMYTIS.ANGELOS.D.1501999799 on Thursday, November 2, 2017 5:49:00 PM	
Subject:	also of interest	
Attachments: Nameless.txt (113 Bytes)		
https://www.apnews.com/3bca5267d4544508bb523fa0db462cb2		

From: "Antonakakis, Manos" <th>EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP</th>	EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
(FYDIBOHF23SPDLT)/CN=RECIPIEN	TS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS>
Sent on: Monday, August 7, 2017 3	:14:21 PM
To: Mike F	; Patel, Tejas H CTR (US) <tejas.patel.ctr@darpa.mil>; Keromytis, Angelos D CIV DARPA</tejas.patel.ctr@darpa.mil>
(US) <angelos.keromytis@darpa.mi< td=""><td> ></td></angelos.keromytis@darpa.mi<>	>
Subject: Data from Daniel	

Gents, on the GT server you all have access, under

, you can find the data that Daniel gave to us.

Thanks,

Manos Antonakakis | manos@gatech.edu FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Saturday, November 3, 2018 2:44:27 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Smith, Jonathan <Jonathan.smith@darpa.mil> Subject: A few thoughts

Gentlemen,

Given the success we had so far on modeling the first four TTPs, we can now see a clear path on how we can fine tune these TTPs in the Pythia oracle. Those TTPs clearly work for groups like EG, out of RU, IR and SA. Maybe more, but these are the ones we have hard data for.

In the last site review meeting we set as goals two things: 1) transition of the Oracle (ActiveDNS mode) to TA2 performers and potential technology transition partners, and 2) the implementation of the remaining 8 TTPs.

The first of these two goals has been achieved. Kudu, Jim, and the AFOSI folks have access to Pythia. The next thing on my queue is to implement some of the remaining TTPs.

After the 4 new case studies in the last month alone (2 from the FBI at Huntsville, DHS and Cyber-command), while people are interested in our attribution results, they are (cynically) using them as a remediation/incident response signal. To that end, I thought it would be best for me to spend a few months building a new classification system that could differentiate between "different modes" that the domains are in. That is, once a domain is identified being part of an APT group, I would like to be able to have (at the very least) a Social Engineering vs. C&C vs. Both set of scores assigned to it.

Have done something similar in the past for malware domains (Kopis paper: <u>http://tinyurl.com/usenixsec11-kopis</u>). The concept could remain somewhat similar, but the code base will have to be rewritten from scratch due to the size and type of our data. The benefit for the program will be huge, IMHO. The reason I think it will be huge is because we have seen to date that there is one thing we can always rely upon: The target networks. If we build such a classification system, I think, given a small set of interesting targets we will very easily find the rest (these will be the networks that systematically are looking up these interesting domains).

Most importantly, this will be a major and fundamental breakthrough on the way we approach the IoC discovery problem. To date, we are waiting for a report to come out or simply declassified IoCs from the high side. Neither of the two can be automated. Instead, if we focus on the target networks (domestic or foreign), we could achieve the systematic retrieval of reliable pools of new IoCs extracted daily from the raw datasets. These new (unknown) IoCs will allow us to start enriching clusters of interesting activity in Pythia, which could reflect bran new operations from unknown actors coming into play.

Obviously, the implementation of such a classification system will only yield more actionable intelligence to our technology transition partners, which can only be good for the program.

So, what do you think is the best thing to do for the program? Continue the development of the remaining TTPs or try to build a tailored classification system in Kopis' spirit?

Thanks,

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Sunday, September 9, 2018 3:22:18 AM To: Smith, Jonathan <jonathan.smith@darpa.mil>; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: Current mode Attachments: current_mode.png (15.65 KB)

Gents, expect something truly amazing soon. You might not need me anymore for EA.

You will just need data.

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, March 2, 2018 7:29:56 PM To: manos@gatech.edu Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, March 2, 2018 7:29:55 PM Subject: Background material Attachments: Nameless.txt (75 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, November 27, 2018 5:50:03 PM To: Antonakakis, Manos <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, November 27, 2018 5:49:58 PM Subject: Apple Watch Attachments: Nameless.txt (130 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, November 2, 2017 4:13:51 PM To: manos@gatech.edu Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, November 2, 2017 4:13:51 PM Subject: also on case 2 Attachments: Nameless.txt (96 Bytes) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Monday, December 18, 2017 8:51:01 PM To: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Patel, Tejas H CTR (US) <tejas.patel.ctr@darpa.mil> Subject: ActiveDNS API ready

Gents, Panos managed to put all (~3 years) the ActiveDNS data in memory using ~400GB. This allows users to get results back in O(1) complexity. It takes the cluster 3 hours every day to refresh the API tables to expose new data. So you need a box with 1TB of RAM for the API if you do not want to endure any downtime. Such a box costs ~\$50K and about about to order a second, in which I will place all the other proprietary DNS data we have. :)

We plan to expose the ActiveDNS API to the EA teams soon as a REST API that will be based on network IP ACL. This will eliminate the need to hit our cluster for most of the operations they need to conduct via DNS.

This is a heads up.

—

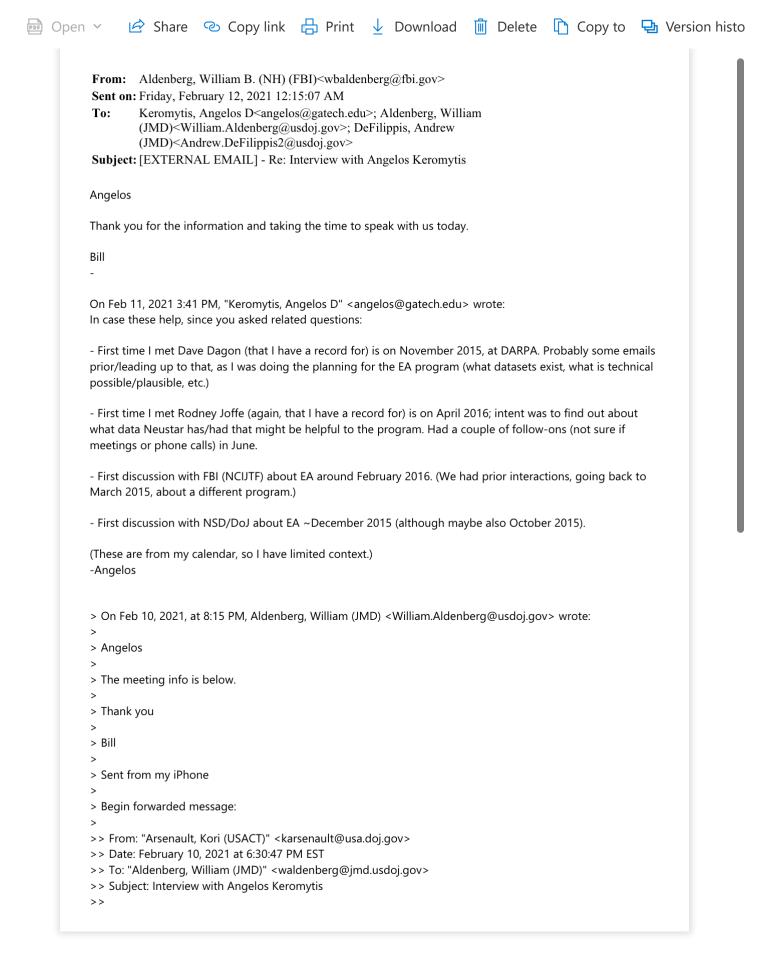
From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, November 29, 2017 4:48:20 PM To: Patel, Tejas H CTR (US) <tejas.patel.ctr@darpa.mil>; Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil> CC: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: Active DNS Setup Demo

Gents, I just sent you a 2 minutes clip of the ActiveDNS setup demo. If I cannot use my own hardware, it would be great to have this clip on the same computer as the slide deck. We will also put it on the website for the performers to view after the presentation.

Thanks,

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, July 25, 2018 5:35:04 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Accepted: Sync with Brandon Johns @ GT Attachments: meeting.ics (1.4 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, September 27, 2018 1:53:44 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Accepted: HOLD for USCC CNMF Case Study presentation Attachments: meeting.ics (1.41 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, September 20, 2018 7:20:53 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Accepted: GT EA Site visit Attachments: meeting.ics (1.4 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, November 6, 2018 1:01:13 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Accepted: Follow up with DHS (Conference Call) Attachments: meeting.ics (1.37 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, November 6, 2018 1:49:52 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Accepted: FBI Huntsville Follow up (Conference Call) Attachments: meeting.ics (1.38 KB)

RESPONSIVE - OneDrive



From: Aldenberg, William B. (NH) (FBI)<wbaldenberg@fbi.gov>

Sent on: Friday, February 12, 2021 12:15:07 AM

To: Keromytis, Angelos D<angelos@gatech.edu>; Aldenberg, William (JMD)<William.Aldenberg@usdoj.gov>; DeFilippis, Andrew (JMD)<Andrew.DeFilippis2@usdoj.gov>

Subject: [EXTERNAL EMAIL] - Re: Interview with Angelos Keromytis

Angelos

Thank you for the information and taking the time to speak with us today.

Bill

-

On Feb 11, 2021 3:41 PM, "Keromytis, Angelos D" <angelos@gatech.edu> wrote: In case these help, since you asked related questions:

- First time I met Dave Dagon (that I have a record for) is on November 2015, at DARPA. Probably some emails prior/leading up to that, as I was doing the planning for the EA program (what datasets exist, what is technical possible/plausible, etc.)

- First time I met Rodney Joffe (again, that I have a record for) is on April 2016; intent was to find out about what data Neustar has/had that might be helpful to the program. Had a couple of follow-ons (not sure if meetings or phone calls) in June.

- First discussion with FBI (NCIJTF) about EA around February 2016. (We had prior interactions, going back to March 2015, about a different program.)

- First discussion with NSD/DoJ about EA ~December 2015 (although maybe also October 2015).

(These are from my calendar, so I have limited context.) -Angelos

> On Feb 10, 2021, at 8:15 PM, Aldenberg, William (JMD) <William.Aldenberg@usdoj.gov> wrote:

- >
- > Angelos
- >
- > The meeting info is below.
- >
- > Thank you
- >
- > Bill
- >
- > Sent from my iPhone
- >
- > Begin forwarded message:
- >
- >> From: "Arsenault, Kori (USACT)" <karsenault@usa.doj.gov>
- >> Date: February 10, 2021 at 6:30:47 PM EST
- >> To: "Aldenberg, William (JMD)" <waldenberg@jmd.usdoj.gov>
- >> Subject: Interview with Angelos Keromytis
- >>

From: Antonakakis, Manos<fvirgil6@gatech.edu> on behalf of Antonakakis, Manos

Sent on: Thursday, March 11, 2021 6:01:56 PM

- **To:** Kline, Allison<allison.kline@darpa.mil>; Schneck, Christopher (contri2o)<christopher.schneck.ctr@darpa.mil>
- BCC: Antonakakis, Manos<manos@gatech.edu>; Rodney Joffe<rodney.joffe@team.neustar>; Keromytis, Angelos D<angelos@gatech.edu>

Subject: Just talked with Rodney

Folks, I should not have called him. That was a terrible idea.

As I speculated, he nearly chewed my head off. He said, all targeting analysis (*especially* for SUNBURST) out of the SLD data is by definition an operational task and should not be given to USG/DoD via EA. I walked him back from that by saying what if we just give DARPA opaque information for DoD and a few other important USG networks only? He agreed to that but, he wants you to call him and explain why EA needs one more win to show the value in his data. Sorry, I could not answer that point for you.

He said this is the last thing he is doing for EA since he has not been treated correctly (and I am paraphrasing his exact statement for obvious reasons...)

I will work on a few slides for DoD and USG *opaque* targeting SUNBURST analysis through the SLD GT datasets all day today and tomorrow. Please do not ask me to call Rodney again, I am losing face to someone that used to respect me in the industry.

Thanks, Manos

From: Antonakakis, Manos<fvirgil6@gatech.edu> on behalf of Antonakakis, Manos

- Sent on: Friday, March 12, 2021 12:43:53 AM
- To: Kline, Allison<allison.kline@darpa.mil>; Rodney Joffe<rodney.joffe@team.neustar>
- CC: Schneck, Christopher (contr-i2o)<christopher.schneck.ctr@darpa.mil>
- BCC: Antonakakis, Manos<manos@gatech.edu>

Subject: New DARPA EA PM

Hey Rodney,

Allow me to re-introduce to Allison, who is the new EA PM. I think it would be a great idea for the two of you to get on a call and catch up about the status of things.

Thanks, —

Manos Antonakakis, Ph.D. | manos@gatech.edu

College of Engineering Dean's Professorship Chair and Associate Professor

Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS)

School of Electrical and Computer Engineering | Georgia Institute of Technology

FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Rodney Joffe<rodney.joffe@team.neustar>

Sent on: Wednesday, April 14, 2021 6:42:47 PM

To: Mitchell, Michael F<michael.mitchell@ece.gatech.edu>

CC: Antonakakis, Manos<manos@gatech.edu>; Colin Monaghan<colin.monaghan@team.neustar>

Subject: Re: Data subscription extension

Hello Michael,

Many thanks. Putting it into process now.

Regards Rodney

> On Apr 14, 2021, at 2:31 PM, Mitchell, Michael F <michael.mitchell@ece.gatech.edu> wrote:

>

> Hey Rodney,

>

> I was following up on the requisition that I put in for this and found that the PO was executed for this. The PO number is PO-5145022. If you have not yet done so, would you please send an invoice for this PO to apinvoices@gatech.edu with a subject line of PO-5145022?

>

> Let me know if you have any questions or need help on this.

>

> Thanks!

>

> Michael

>

> -----Original Message-----

- > From: Rodney Joffe <rodney.joffe@team.neustar>
- > Sent: Friday, February 12, 2021 2:57 PM
- > To: Antonakakis, Manos <manos@gatech.edu>
- > Cc: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>
- > Subject: Re: Data subscription extension

>

> Hi Manos and Michael,

>

> We think we have accurately completed the registration form. Please let me know if there is anything else needed.

>

> Thanks!

> Rodney

> >

>>

>> On Feb 12, 2021, at 11:51 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>> OK, let start asap. I cannot go back to DARPA and say that I cannot do this because GT is not moving fast enough. I will lose face.

>>

- >>
- >>
- >> Manos

>>

>> >>

~

>> From: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>

>> Date: Friday, February 12, 2021 at 11:31 AM

>> To: Antonakakis, Manos <manos@gatech.edu>, Rodney Joffe <rodney.joffe@team.neustar>

>> Subject: RE: Data subscription extension

- >>
- >> Manos,
- >>
- >> >>

>> It really depends on how quickly the subsidiary is able to get registered in the system (outside of our control), send us

From: Mitchell, Michael F<fvirgil6@gatech.edu> on behalf of Mitchell, Michael F

Sent on: Wednesday, April 14, 2021 6:31:26 PM

To: Rodney Joffe<rodney.joffe@team.neustar>

CC: Antonakakis, Manos<manos@gatech.edu>

Subject: RE: Data subscription extension

Hey Rodney,

I was following up on the requisition that I put in for this and found that the PO was executed for this. The PO number is PO-5145022. If you have not yet done so, would you please send an invoice for this PO to apinvoices@gatech.edu with a subject line of PO-5145022?

Let me know if you have any questions or need help on this.

Thanks!

Michael

-----Original Message-----From: Rodney Joffe <rodney.joffe@team.neustar> Sent: Friday, February 12, 2021 2:57 PM To: Antonakakis, Manos <manos@gatech.edu> Cc: Mitchell, Michael F <michael.mitchell@ece.gatech.edu> Subject: Re: Data subscription extension

Hi Manos and Michael,

We think we have accurately completed the registration form. Please let me know if there is anything else needed.

Thanks! Rodney

> On Feb 12, 2021, at 11:51 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> OK, let start asap. I cannot go back to DARPA and say that I cannot do this because GT is not moving fast enough. I will lose face.

- >
- >
- >

> Manos

>

>

>

> From: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>

> Date: Friday, February 12, 2021 at 11:31 AM

> To: Antonakakis, Manos <manos@gatech.edu>, Rodney Joffe <rodney.joffe@team.neustar>

> Subject: RE: Data subscription extension

>

> Manos,

>

>

>

> It really depends on how quickly the subsidiary is able to get registered in the system (outside of our control), send us the quote, and how responsive they are to the inquiries and requests for documentation that procurement needs. I would say probably 3 weeks on the short side accounting for some back and forth between supplier and contracting officer.

- >
- >

> Rodney,

>

> >

> Would you please have the new company register as a vendor in our system. No action on our part can be completed

From: Rodney Joffe<rodney.joffe@team.neustar>

Sent on: Friday, February 12, 2021 5:17:55 PM

To: Antonakakis, Manos<manos@gatech.edu>

CC: Mitchell, Michael F<michael.mitchell@ece.gatech.edu>

Subject: Re: Data subscription extension

We're on it.

> On Feb 12, 2021, at 11:51 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> OK, let start asap. I cannot go back to DARPA and say that I cannot do this because GT is not moving fast enough. I will lose face.

> .

> Manos

>

> From: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>

> Date: Friday, February 12, 2021 at 11:31 AM

> To: Antonakakis, Manos <manos@gatech.edu>, Rodney Joffe <rodney.joffe@team.neustar>

> Subject: RE: Data subscription extension

>

> Manos,

>

> It really depends on how quickly the subsidiary is able to get registered in the system (outside of our control), send us the quote, and how responsive they are to the inquiries and requests for documentation that procurement needs. I would say probably 3 weeks on the short side accounting for some back and forth between supplier and contracting officer.

> Rodney,

>

> Would you please have the new company register as a vendor in our system. No action on our part can be completed until we have the quote and the new company's registration is done. This link will allow for a new account to be set up, including routing details for payments on future invoices. A new PO will be issued.

> >

https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwd5.myworkdaysite.com%2Fsupplier%2Fgatech%2F >

> Let me know if you have questions!

>

> M >

>

- > From: Antonakakis, Manos <manos@gatech.edu>
- > Sent: Friday, February 12, 2021 9:29 AM
- > To: Rodney Joffe <rodney.joffe@team.neustar>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu>
- > Subject: Re: Data subscription extension
- >
- > Rodney this makes sense.
- >
- > Michael, can I get an ETA on this being one?
- >
- > Thanks, Manos
- >
- > From: Rodney Joffe <rodney.joffe@team.neustar>
- > Date: Thursday, February 11, 2021 at 9:39 PM
- > To: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>
- > Cc: Antonakakis, Manos <manos@gatech.edu>
- > Subject: Re: Data subscription extension
- > > Hello Michael,
- >
- > Thank you for the opportunity.

>

> I will have the quote prepared for you by Monday. It will be a new quote, with the same general terms and conditions as the original contract. However, it will cover 3 months, and it will confirm that if needed, an additional PO for the remainder

AFTER DISCUSSION WITH THE DEAN, PROVOST AND A COUPLE OF OTHERS, GT WOULD PROPOSE TO STAY WITH THE \$260K/9-MONTHS OFFER AND PUT IN PLACE AN INCENTIVE PLAN THAT GETS THE SALARY TO THE LEVEL YOU WOULD LIKE WITHIN 24 MONTHS OF YOUR ARRIVAL. THIS APPROACH WOULD THEN MIRROR HOW WE WOULD HANDLE THE STARTUP EQUIPMENT PIECE AS WELL – FOR EXAMPLE, TWO 5% RAISES WOULD GET TO THE \$286K/9-MONTHS POINT IN TWO YEARS, 7.5% WOULD BE 300..

WITH REGARD TO USING THE CHAIR FUNDS FOR FAMILY PERSONAL TRAVEL UNFORTUNATELY I LEARNED THAT THAT IS OUT OF SCOPE FOR CHAIR FUNDS

2. Weitnauer Chair: I am honored, and the terms of the position look great. No further discussion needed.

3. Student and postdoc support: if \$200K/year covers 2 PhD GRAs and 1 postdoc, then this looks good. I would, however, ask for flexibility when it comes to the postdoc — it may not be possible to hire one right away, based on market conditions. Perhaps \$200K/year for the first 2 years, where the spending itself can be stretched into Year 3 (and 4)?

NO PROBLEM WITH MOVING INTO YEARS 3 AND 4

4. Staff support: Is the admin/finance person shared or dedicated? Same question for the computer support person.

DEDICATED TO YOU BUT MIGHT BE EXANDED TO ADDRESS THE HIRES IN SUBSEQUENT YEARS 5. Cluster hire in cybersecurity: 2 hires in ECE is too little. 3 is the minimum needed; 4 would be much better. I'd be happy to coordinate as needed across campus to ensure the 8-10 slots are used well. WE NEED TO STICK WITH 3 AND IT WOULD NEED TO SPREAD ACROSS 6 OR MORE YEARS. WE CAN DISCUSS MORE, FOR EXAMPLE THESE WOULD ALMOST CERTAINLY NEED TO BE JUNIOR HIRES 6. Teaching expectations: looks good. I would expect at least 2 of the 3 courses/year to be on security; and buying out of one of the three courses would make my load 2 security courses per year? I HOPE YOU WOULD BE ABLE TO BE FLEXIBLE WITH THE TECHNICAL INTEREST GROUP (TIG) – TEACHING ASSIGNMENTS ARE HANDLED AS A GROUP AND IT WOULD BE GOOD IF YOU WOULD BE WILLING TO TEACH SOME MORE GENERAL COURSES HERE AND THERE.

7. Research Equipment Startup: This one caught me by surprise. Given past average investments by GRA and everything that was said on the subject, a "reduction" to less than half the projected budget makes me wonder what the near-term benefit of the association with GRA is? Not to put too fine a point on it: I'd rather not be the cheapest GRA Eminent Scholar in history. Is the \$3M coming out of GT-only funds? If so, is there a potential for later-on injection of additional GRA funds, if for whatever reason an investment in the immediate future is not feasible? Also, would you be open to some form of ICR, whereby for every \$1M of research funds, the school invests \$125K in additional research equipment funds?

Spreading the spending over some number of years is not a problem, although it will be a step function with a significant up-front outlay (perhaps as much as \$1M).

As for availability to other responsible users in the cybersecurity and related research community: I am open to it in principle, but there are some complexities arising from working on DoD (e.g., DARPA) and similar projects, which impose some protection requirements to technical data (including code). Similar protection needs arise from handling sensitive (unclassified, obviously) data — whether from the USG or private partners. All this to day that not everyone can have access; however, I would expect any active member of the cybersecurity "group" (loosely defined) to be eligible for such access. *THIS REQUIRES MORE TIME – IN MY EMAIL EARLIER THIS WEEK I WOULD SUGGESTED THAT WE HAVE YOU COME BACK TO TECH AND TALK WITH GRA, STEVE CROSS AND PUT IN PLACE AN INCENTIVE PLAN THAT HAS EVERYONE ALIGNED*.

8. Space: If we are to build a large group in cybersecurity, we need to bring all the interested/relevant parties together in close proximity. So, having sufficient space for my staff and students alone is not enough; I would like a commitment that there will be space in reasonably close proximity (if not contiguous) for everyone in the cybersecurity cluster (both existing faculty+students, and projected hires — per item 5, above). I am less concerned about where.

100% AGREE – STILL IS TBD FOR THE EXACT LOCATION.

Steven W. McLaughlin, Ph.D Steve W. Chaddick School Chair & Professor School of Electrical and ComputerEngineering From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, March 14, 2018 2:56:25 PM To: Antonakakis, Manos <manos@gatech.edu>; Tejas Patel <tejas@kududyn.com> Subject: fyi

https://securelist.com/the-devils-in-the-rich-header/84348/

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Saturday, March 10, 2018 12:12:28 AM To: Antonakakis, Manos <manos@gatech.edu>; tejas@kududyn.com Subject: fyi

https://www.securityweek.com/nsa-used-simple-tools-detect-other-state-actors-hacked-devices

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Saturday, March 10, 2018 12:12:09 AM To: Antonakakis, Manos <manos@gatech.edu>; thpatel@kududyn.com Subject: fyi

https://www.securityweek.com/nsa-used-simple-tools-detect-other-state-actors-hacked-devices

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Sunday, December 10, 2017 8:16:21 PM To: The second secon

https://citizenlab.ca/2017/12/champing-cyberbit-ethiopian-dissidents-targeted-commercial-spyware/

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, October 3, 2017 3:57:03 AM

To: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>

CC: Childs, Nixon P CIV (US <nixon.p.childs.civ@mail.mil>; Wilson, Ryan D CIV (US <ryan.d.wilson38.civ@mail.mil>; Whalen, Daniel J CW2 USARMY CYBER PRO BDE (US <daniel.j.whalen14.mil@mail.mil>; Lucy, David P CW4 USARMY CYBER PRO BDE (US <daniel.j.whalen14.mil@mail.mil>; Lucy, David P CW4 USARMY CYBER PRO BDE (US <daniel.j.whalen14.mil@mail.mil>; Lucy, David P CW4 USARMY CYBER PRO BDE (US <daniel.j.whalen14.mil@mail.mil>; Lucy, David P CW4 USARMY CYBER PRO BDE (US <daniel.j.whalen14.mil@mail.mil>; Lucy, David P CW4 USARMY CYBER PRO BDE (US <daniel.j.whalen14.mil@mail.mil>; Lucy, David P CW4 USARMY CYBER PRO BDE (US <daniel.j.whalen14.mil@mail.mil>; Lucy, David P CW4 USARMY CYBER PRO BDE (US <daniel.j.whalen14.mil@mail.mil>; Lucy, David P CW4 USARMY CYBER PRO BDE (US <daniel.j.whalen14.mil@mail.mil>; talarse@nsa.gov; Keromytis, Angelos D CIV DARPA (US) ; Farrell, Michael D (Michael.Farrell@gtri.gatech.edu>; (chunt@fbi.gov; wdware@fbi.gov)

Subject: Georgia Tech Enhanced Attribution Meeting 10/04 --- Room Location

Folks, please relay this message to your teams and whoever is planning to attend. Note we still have room for 5 more people.

The meeting will take place at:

Klaus Advance Computing Building, Room 3402. Georgia Institute of Technology 266 Ferst Drive, Atlanta, GA 30332-0765

The room fits 25 people, and from the responses I have received (so far) we should be less than (or about) 20. We will have breakfast starting at 08.00am and (working) lunch will be served at 11.30am. If you plan to drive, you can park here, right besides the School of Physics Building, at the West campus visitor parking:

https://tinyurl.com/GT-coc-guest-park

Then you can simply walk to Klaus Advance Computing Building. Our meeting room 3402 will be at the third floor (two doors on the right from my office, room 3364).

Chad/Davey, I know this is a late notice, however, you are more than welcome to attend (if you wish). Michael, can explain more about this tomorrow.

If you need anything, my cell phone is (202) 285-0909. You can call me anytime.

Looking forward hosting you at Georgia Tech and the Astrolavos Lab --- safe travels!

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, October 10, 2018 1:21:39 AM To: Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Achanta, Venkat <Venkat.Achanta@team.neustar>; Joffe, Rodney <Rodney.Joffe@team.neustar>; Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil> CC: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; Ian Crone <ian.crone@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: HACCS --- clarifications and status update

Hey Venkat and Rodney,

I spent some time today at DARPA with Allison and Tom. My understanding is that it could take up to 40 days until GT will be able to receive a portion of the funds for your data. Once that portion is received, GTRI will have to follow their processes (please be proactive and coordinate with Michael about what these processes are) to get the PO out to you.

Despite the fact that Ian (the new PM for the program) and Michael (the GTRI PI) are extremely busy people, I would highly suggest that after the PO has been issued from GTRI, you should have a discussion with them on how the future POs will be scheduled/executed. This will help avoid any confusion, and set expectations right for all parties.

It is advisable to reach out to Tom and Allison on any inquires you may have about the status of future dataset POs for HACCS. While technically Michael has the final authority to issue the PO, Tom and Allison are the ones able to give you a sense (after coordinating with Ian, of course) on when funds will be allocated for future HACCS datasets POs.

Your administrative POC as far as the GTRI/GT team goes for HACCS is Michael not me. Always happy to be consulted about technical issues that surrounds the data but I cannot be, for example, your POC for the POs. Michael is the PI, you should be working directly with him.

Rodney and Venkat. Sorry that this dragged for so long. It appears that we managed to place everything on the right path, so please follow the advise that the DARPA team (Tom, Allison & Ian) and Michael will offer you in the future. This way we can ensure a long and mutual beneficial collaboration between all parties, and we will not have to go through the same issues/miss-understandings ever again.

Many thanks,

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, May 18, 2018 1:45:39 AM To: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>; Hall, John <John.Hall@team.neustar> CC: Joffe, Rodney <Rodney.Joffe@team.neustar> Subject: HACCS add on for Neustar

Michael, please work with John to make sure that Neustar gets the add on that we discussed.

John, Michael will be working with Allison (from DARPA) to make everything happen for Neustar. Michael will also navigate the internal GT process on your behalf. Please work with him, as he needs more information from you. Please, follow Michael's lead.

Rodney, GT is closing the fiscal year. This will have to wait until the new fiscal year kicks in (Michael, is this June or July 1st?).

Thanks,

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Saturday, July 28, 2018 4:28:56 PM To: Lummis, Anant J <jimmy.lummis@security.gatech.edu>; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: HACCS PI meeting and side talk

Hey Jimmy,

Per our discussion a couple of days ago, can you please swing by my office Monday (anytime that works for you after 13.00) to meet the DARPA and CyberCommand teams?

Thanks,

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Monday, July 2, 2018 6:28:18 PM To: perdisci@gtisc.gatech.edu; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> CC: Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; Macon, George A <George.Macon@gtri.gatech.edu> Subject: HACCS Team update: Dr. Perdisci

Folks,

As of today, Dr. Perdisci will be joining my team at GT to help me out for HACCS. After battling the University System of Georgia for almost 6 months, we won and Roberto will join my team at GT for at-least two years. In reality, he will never leave, but this is not the point of this email.

The point of this email is that Roberto will have the same level of access that I have to the cluster and the datasets for both HACCS and EA --- simply because he is part of my team and not GTRI. This is a critical point that I *must* comply with so I will not violate my existing data NDAs. What this means for you? This means that, using the existing level of automation we have in place for EA, Roberto will be able to help you build some case studies that will help promote the HACCS program in the same way we did for the EA program.

Roberto will be the technical POC for HACCS when I am not available (or simply super busy with EA). I will bring him up to speed this week, clarify all SOW tasks, discuss the three case studies you want us to deliver (and all the problems associated with them), and by next week or so, he should be able to ready to take over the technical side of the Gnomon project.

Allison, please invite him to the bi-weekly calls, so Roberto can represent my team in these calls. Also, if you are still using the slack channel, invite him there too.

Final point I would like to clarify. I am not opting out from HACCS. I will be very much involved and I will have weekly discussions about everything with Roberto about the progress against the SOW and the case studies we will conduct under HACCS. This is just a way for me to manage both EA and HACCS without sacrificing the quality and rigor of the produced work.

Roberto shaped me as a young researcher while still a PhD student at GT. I cannot think of a better person to "sub" me until things calms down in EA.

Roberto, welcome to the team, buddy!

Thanks,

From:Keromytis, Angelos<angelos.keromytis@darpa.mil>Sent on:Thursday, June 22, 2017 12:08:30 AMTo:Patel, Tejas (contr-i2o)<tejas.patel.ctr@darpa.mil>; mikef@kududyn.com; manos@gatech.eduSigned by:KEROMYTIS.ANGELOS.D.1501999799 on Thursday, June 22, 2017 12:08:29 AMSubject:hehAttachments: Nameless.txt (484 Bytes)

https://intel.malwaretech.com/pewpew.html

Dr Angelos D. Keromytis Program Manager, Information Innovation Office (I2O) DARPA 675 N. Randolph Street Arlington, VA 22203

(T) 571-218-4290

Angelos.Keromytis@darpa.mil(NIPR) Angelos.Keromytis@darpa.smil.mil(SIPR) Angelos.Keromytis@darpa.ic.gov(JWICS)

From:	Keromytis, Angelos <angelos.keromytis@darpa.mil></angelos.keromytis@darpa.mil>
Sent on:	Wednesday, August 16, 2017 9:39:05 PM
To:	manos@gatech.edu; mikef@kududyn.com
CC:	Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil></tejas.patel.ctr@darpa.mil>
Signed by:	KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, August 16, 2017 9:39:05 PM
Subject:	interesting article
Attachments: Nameless.txt (193 Bytes)	
1	

https://mobile.nytimes.com/2017/08/16/world/europe/russia-ukraine-malware-hacking-witness.html?

From:Keromytis, Angelos<angelos.keromytis@darpa.mil>Sent on:Thursday, November 2, 2017 5:45:20 PMTo:manos@gatech.eduCC:Patel, Tejas (contr-i2o)<tejas.patel.ctr@darpa.mil>Signed by:KEROMYTIS.ANGELOS.D.1501999799 on Thursday, November 2, 2017 5:45:20 PMSubject:interesting articleAttachments:Nameless.txt (243 Bytes)https://www.washingtonpost.com/news/the-switch/wp/2017/11/02/what-is-qiwi-and-how-is-it-related-to-

russian-election-ads/

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Sunday, April 29, 2018 1:15:56 PM To: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; tejas@kududyn.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Interesting talk

https://www.youtube.com/watch?v=u-j4KP_ls1Q

Do not agree with all he talked about, but he makes several points that are valid.

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, April 25, 2018 12:50:59 AM To: tom@ncfta.net CC: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: Introductions and invitation to DARPA EA PI meeting

Hey Tom,

Hope you are doing great!

Allow me to introduce you to the DARPA PM Dr. Angelos Keromytis. Angelos happens to be the PM from one of my projects with focus on attack attribution.

We are having the next PI meeting at Georgia Tech in Atlanta, June 8th. We would be very happy to have you in this meeting, if you want to join us. Angelos can give you more details about what we will be talking about if you ping him on the classified network.

Many thanks!

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Monday, October 29, 2018 5:17:01 PM To: rock.a.stevens.mil@mail.mil; Manos Antonakakis <manos@gatech.edu> Subject: Introductions

Manos,

Meet MAJ Rock Stevens, stationed in Augusta. He was very interested in the analysis you did back in ~May about the middle eastern botnet and the possibilities for neutralizing it. Chris is on vacation; if you have it handy, could you share it with Rock?

I think you had done some analysis more recently (last week?) at Chris' suggestion?

Rock, Manos is the PI for the Georgia Tech EA project and technical lead/co-PI on their HACCS project. Best,

-Angelos

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, May 17, 2018 10:03:18 PM

To: Matt.Carothers@cox.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> CC: Smith, Jonathan <jonathan.smith@darpa.mil>; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: Invitation to the upcoming EA PI meeting

Hey Matt,

Per our recent discussion around our attribution work in EA, you are invited to attend the next PI meeting in Atlanta (06/08/2018). The meeting will take place in GTRI's facilities (14th Street) --- more information will be shared as we get closer to June 8th.

Many thanks to the PM team, Dr. Smith and Dr. Keromytis, for granting this invitation.

Please work with Chris to finalize any other information that are necessary for you to attend this meeting.

Many thanks,

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, September 21, 2017 8:56:56 PM To: manos@gatech.edu CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: it would be good...

...to get me whatever stuff you have for Case 2 (SB) by tomorrow noon...I'll be meeting those guys in the afternoon. -Angelos

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, January 10, 2018 9:44:28 PM To: manos@gatech.edu CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: just for giggles

This:

http://google.com-us3-war2.win-cool-prizes-today.bid/

Was the target of a malvertisement redirect on NYTimes today! :)

Dr Angelos D. Keromytis Program Manager, Information Innovation Office (I2O) DARPA 675 N. Randolph Street Arlington, VA 22203

(T) 571-218-4290

Angelos.Keromytis@darpa.mil<mailto:Angelos.Keromytis@darpa.mil> (NIPR) Angelos.Keromytis@darpa.smil.mil<mailto:Angelos.Keromytis@darpa.smil.mil> (SIPR) Angelos.Keromytis@darpa.ic.gov<mailto:Angelos.Keromytis@darpa.ic.gov> (JWICS) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, May 2, 2018 3:40:42 AM To: Smith, Jonathan <jonathan.smith@darpa.mil>; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Local FBI request

Gents, we received a request from the local FBI office to help them with attribution in a case they are working on. Do not have the full details yet (loCs, etc.), but I would like to help them out if the request is not something extreme.

Please let me know if you object to this.

Thanks,

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, December 15, 2017 7:33:13 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: meeting and stuff

Mano,

The meeting is being scheduled for February 2 --- I *assume* Michael is the one on your side that is talking to Scott and doing the planning.

On a different note, it may be worth having a student look at a malware/botnet that some folks in industry have named ExploderBot.

-Angelos

From: Manos Antonakakis <manos@gatech.edu> Sent on: Tuesday, August 14, 2018 4:31:44 PM To: darin j < _______ > CC: brandon@diux.mil; _______ Scott Taylor < angelos.keromytis@darpa.mil Subject: <no subject> christopher.schneck.ctr@darpa.mil, jonathan.smith@darpa.mil

>;

Bcc: manos@gatech.edu Subject: Re: Questions re last visit Reply-To: In-Reply-To:

Hey Darin,

Thank you for your message. We have been instructed by DARPA to work on other active and very pressing cases. Please work with the PM team to slot this request into our queue.

Again, I would like to thank you for taking a trip down to GT. My lab and my team will always be here for you guys!

Thanks,

--

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Monday, July 23, 2018 11:15:37 PM To: Manos Antonakakis <manos@gatech.edu>; perdisci@gtisc.gatech.edu; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Michael.Farrell@gtri.gatech.edu Subject: Monday site visit

What's the specific location for the HACCS meeting?

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS>

Sent on: Friday, March 12, 2021 12:43:53 AM

- To: Kline, Allison<allison.kline@darpa.mil>; Rodney Joffe<rodney.joffe@team.neustar>
- CC: Schneck, Christopher (contr-i2o)<christopher.schneck.ctr@darpa.mil>

Subject: New DARPA EA PM

Hey Rodney,

Allow me to re-introduce to Allison, who is the new EA PM. I think it would be a great idea for the two of you to get on a call and catch up about the status of things. Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu

College of Engineering Dean's Professorship Chair and Associate Professor

Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS)

School of Electrical and Computer Engineering | Georgia Institute of Technology

FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, August 22, 2017 7:07:56 PM To: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Patel, Tejas H CTR (US) <tejas.patel.ctr@darpa.mil> Subject: On site visit update

Folks, if you are willing to have a working breakfast (starting at 8.30am), and a to-go lunch boxes, we can have the update in 4 hours, instead of 8. I know you are busy so every hour counts.

Up to you.

_

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, August 23, 2018 6:18:00 PM To: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Kline, Allison (contr-i2o)

<allison.kline.ctr@darpa.mil>; tejas@kududyn.com

Subject: Operation AppleJeus: Lazarus hits cryptocurrency exchange with fake installer and macOS malware

https://securelist.com/operation-applejeus/87553/

From: Keromytis, Angelos<angelos.keromytis@darpa.mil>

Sent on: Thursday, January 4, 2018 7:49:05 PM

To: mikef@kududyn.com; manos@gatech.edu

CC: Patel, Tejas (contr-i2o)<tejas.patel.ctr@darpa.mil>

Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, January 4, 2018 7:48:57 PM

Subject: probably useful in the near future

Attachments: Nameless.txt (207 Bytes)

https://carnegieendowment.org/2018/01/04/iran-s-cyber-threat-espionage-sabotage-and-revenges-pub-75134 From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, November 2, 2017 3:40:04 PM To: manos@gatech.edu Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, November 2, 2017 3:40:00 PM Subject: quick call Attachments: Nameless.txt (32 Bytes) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Monday, November 13, 2017 12:26:51 PM To: Joffe, Rodney <Rodney.Joffe@team.neustar>; Rodney Joffe <rodney.joffe@neustar.biz> Subject: Fw: EA PI Meeting: 1 December 2017 (Friday) at the DCC --- Response needed by COB on 27 November 2017 Attachments: DARPA104.pdf (625.72 KB), DARPA60.pdf (636.01 KB)

Rodney, please note the new registration process you have to go through in order to attend the meeting. Let me know if you want to be there. Cheers,

Cheel

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Monday, November 13, 2017 7:25 AM To: fabian@cs.unc.edu; Farrell, Michael D; Demar, Jeremy; perdisci@cs.uga.edu; Ahamad, Mustaque;

Blough, Douglas M Subject: Fw: EA PI Meeting: 1 December 2017 (Friday) at the DCC --- Response needed by COB on 27 November 2017

Folks, please see inline -- the registration process has changed. Let me know if you can make this meeting.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>

Sent: Thursday, November 9, 2017 1:18 PM

To: Maddern, Thomas (contr-i2o); Patel, Tejas (contr-i2o)

Cc: ; Antonakakis, Manos; Robert Wright; Neil Costigan; Scott Tenaglia; Vince Urias; Stephen Schwab; Ben Radford

Subject: EA PI Meeting: 1 December 2017 (Friday) at the DCC --- Response needed by COB on 27 November 2017

All:

The registration process for this PI meeting will be different from previous ones. Rather than going through a registration website, we're requesting that each PI respond to Tom Maddern (thomas.maddern.ctr@darpa.mil) with the names, organizations, and countries of citizenship for each of your team members planning on attending. Please provide this information by COB Monday, November 27th.

Each individual attending will need to bring a completed DARPA Form 104 (attached) along with a government issued ID to the meeting. Non-US citizens will need to submit a DARPA Form 60 (attached) in advance.

Due to a recent DARPA policy change, we are no longer permitted to collect registration fees for covering expenses associated providing with food and beverages at PI meetings. Instead, as shown in the agenda, time will be allowed for lunch and other refreshments to be purchased individually at one of the many local restaurants near DARPA or in the café near the building lobby.

Any questions or concerns you may have about this meeting can be directed to both Tom and myself.

Regards, Tejas Patel Systems Engineering and Technical Assistance DARPA I2O work: +1 571-218-4936 blackberry: +1 571-239-5912 NIPR: tejas.patel.ctr@darpa.mil SIPR: tejas.patel.ctr@darpa.smil.mil JWICS: tejas.patel.ctr@darpa.ic.gov From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, March 9, 2018 12:13:40 PM To: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Tejas Patel < Subject: Fw: Fully Funded - Prospective PhD CS Applicant (UNCLASSIFIED)

Does the name ring any bells?

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Wenke Lee Sent: Thursday, March 8, 2018 10:17 PM To: Fuller, Jonathan D CPT USARMY ISEC (US) Cc: Kim, Taesoo; Antonakakis, Manos; Ndongi, Elizabeth N; Saltaformaggio, Brendan D Subject: Re: Fully Funded - Prospective PhD CS Applicant (UNCLASSIFIED)

Hi Jonathan,

Thank you for your interests in Georgia Tech! I'd be happy to talk to you, and Elizabeth can help schedule for us. I also suggest you to talk to Prof. Kim, Prof. Antonakakis, and Prof. Saltaformaggio (cc'd here). Thanks.

Wenke

On Thu, Mar 8, 2018 at 10:50 AM, Fuller, Jonathan D CPT USARMY ISEC (US) <jonathan.d.fuller.mil@mail.mil<mailto:jonathan.d.fuller.mil@mail.mil>> wrote:

CLASSIFICATION: UNCLASSIFIED

Professor Lee,

I am a military service member that was recently award a fellowship allowing me to pursue a PhD in Computer Science on a full time, fully funded basis (3 year completion time) starting Fall 2019. I have an MS in Computer Science and my thesis research focused on investigating a relatively new IoT protocol resulting in several publications. Although my previous research is not specifically related to your current research, my broader interests in networking and security brought me to the IISP page. Particularly, I am interested in Embedasploit and ROKI but am open to the various other research areas the IIPS provides. Given previous success of military personnel completing a CS PhD in 3 years a GT and the research conducted by the IIPS, I am more convinced of my desire to attend. I was hoping you would be available to discuss potential advising options if accepted and the feasibility of your support to complete in 3 years. Any help you can provide would be greatly appreciated. From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, May 4, 2018 2:49:41 PM To: Patel, Tejas H CTR (US) <tejas.patel.ctr@darpa.mil>; Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>

CC: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Fw: Georgia Tech Global Learning Center (GLC)/Hackathon

OK, Gents. We did some digging around and we found this great deal inline. \$5100 for room, food, coffee, etc, for 4 days.

This is located adjacent to the GT hotel. So, if you want to host the hackathon the week after the PI meeting, it can be done and it can be done relatively cheaply.

The only problem I have with this is that I have to spend money from my foundation account. As JMS and Aneglos can testify, foundation accounts are kind of priceless. However, if this will help the TA2 transition and the synergy around the entire problem, I would be happy to eat this bill.

Angelos, JMS, Tejas; your thoughts please? We have to move fast so we can secure the place for this event. If we end up with a "yes, lets do it", I will need Chris to work with Michael M. in organizing this (invitations, logistics, etc.).

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Mitchell, Michael F Sent: Friday, May 4, 2018 9:36 AM To: Antonakakis, Manos Subject: FW: Georgia Tech Global Learning Center (GLC)/Hackathon

Hey Manos,

I spoke with our planning and events person for ECE about the Hackathon event per our conversation. She reached out to the Global Learning Center to get an estimate on what they charge for things. They responded fairly quickly with a cost of \$85 per day which includes the room, a buffet lunch, continental breakfast (with 1 Hot item) and a continuous snack/food break service from 7pm to 5 pm which I believe includes self serve coffee, but I will need to verify to be sure.

For 15 people per our meeting it would cost about \$5100. You currently have about 18,000 in the foundation account currently. If this is something you want to do I think this is probably the best/easiest way to do it. Since the week before June 9th seems to be filling up with activities, I think the week after would be best.

Let me know what you want to do.

Michael

From: Oliva, Joanna Sent: Wednesday, May 2, 2018 6:05 PM To: Mitchell, Michael F <michael.mitchell@ece.gatech.edu> Subject: Fw: Georgia Tech Global Learning Center (GLC)/Hackathon

Hey Michael,

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, August 14, 2018 6:59:37 PM To: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> Subject: Fw: Important D60: DARPA's 60th Anniversary Symposium Cybersecurity Information

This is just too funny.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Kintis, Panagiotis Sent: Tuesday, August 14, 2018 1:56 PM To: Antonakakis, Manos Subject: Fwd: Important D60: DARPA's 60th Anniversary Symposium Cybersecurity Information

Panagiotis (Panos), Kintis. http://about.me/kintis

kintis@gatech.edu<<u>mailto:kintis@gatech.edu</u>> panagiotious@gmail.com<mailto:panagiotious@gmail.com> P Think before you print!

Begin forwarded message:

From: DARPA60 <DARPA60@darpa.mil<mailto:DARPA60@darpa.mil>> Subject: Important D60: DARPA's 60th Anniversary Symposium Cybersecurity Information Date: July 20, 2018 at 11:45:52 EDT Cc: DARPA60 <DARPA60@darpa.mil<mailto:DARPA60@darpa.mil>>

All,

Unfortunately hackers are using our DARPA 60th event to target the DoD and others with phishing emails and malware. If you receive an email or have already received one from 60thDARPA[.]net, do not open it and definitely do not click on any attachments or links in emails from this sender.

The only legitimate emails related to our DARPA event will come from our official DARPA60@darpa.mil< <u>mailto:DARPA60@darpa.mil</u>> address or when registering you will receive an automated response from event_registration@bah.com<mailto:event_registration@bah.com>.

Despite this unfortunate incident, we are looking forward to seeing you at D60 in September and if you have any questions about this incident or the event, please contact us at DARPA60@darpa.mil<.

Sincerely, DARPA60 From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, November 8, 2017 7:53:35 PM To: Joffe, Rodney <Rodney.Joffe@team.neustar> CC: Rodney Joffe <rodney.joffe@neustar.biz> Subject: Fw: Notification HR001117S0051-HACCS-FP-029 Attachments: Letter 029.pdf (373.62 KB)

Great news Rodney, we got the official notification that we won HACCS! Please relay the news internally to your team.

Cheers,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: HACCS <haccs@darpa.mil> Sent: Wednesday, November 8, 2017 12:31 PM To: Antonakakis, Manos; Farrell, Michael D Cc: HACCS Subject: Notification HR001117S0051-HACCS-FP-029

Dear Proposer,

Please see the attached file regarding your proposal submission (HR001117S0051-HACCS-FP-029) that was submitted to the Harnessing Autonomy for Countering Cyberadversary Systems (HACCS) solicitation.

Regards,

DARPA/I2O

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Sunday, October 29, 2017 5:56:58 PM To: fabian@cs.unc.edu; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; perdisci@cs.uga.edu Subject: Fw: VMware Systems Research Award: Request for Nominations - Due November 3 Attachments: ManosAntonakakis.pdf (48.77 KB)

FYI- Gents. Thanks for taking time to write the letter for me. What I am pushing here is the reputation system I build back in the day. For its time it was the first dynamic reputation system for Internet DNS infrastracture.

Not sure when/if they will reach out.

Cheers,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Sunday, October 29, 2017 12:53 PM To: Beyah, Raheem A Cc: Romberg, Justin; Howard, Ayanna M Subject: Re: VMware Systems Research Award: Request for Nominations - Due November 3

Hey Raheem,

You need the following from me:

1) A proposed citation of at most 20 words

- Antonakakis, Perdisci, Dagon, Lee and Feamster. "Building a Dynamic Reputation System for DNS", In the 19th USENIX Security Symposium.

2) Contact information for three references:

- Dr. Fabian Monrose, Kenan Distinguished Professor in the Computer Science department at the University of North Carolina at Chapel Hill, fabian@cs.unc.edu

- Dr. Angelos Keromytis, DARPA Manager and Associate Professor Department of Computer Science, Columbia University, New York, angelos.keromytis@darpa.mil

- Dr. Roberto Perdisci, Associate Professor, Department of Computer Science, University of Georgia, perdisci@cs.uga.edu

3) A one-page summary statement concerning the originality, impact, and future potential of the nominee's research.Attached.

Please let me know if you need anything more.

Cheers,

From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Friday, November 17, 2017 7:07:28 PM

To: Angelos Keromytis<angelos.keromytis@darpa.mil>; Tejas Patel<tejas.patel.ctr@darpa.mil> **Subject:** Fwd: DoD Employee looking for contact info (Cyber Attribution Team)

How should I handle this?

Typos due to mobile device ... Begin forwarded message:

From: "Keen, Kayla (CIV)" <<u>knkeen@nps.edu</u>>
Date: November 17, 2017 at 12:42:16 EST
To: "manos@gatech.edu" <<u>manos@gatech.edu</u>>
Subject: RE: DoD Employee looking for contact info (Cyber Attribution Team)

Professor Antonakakis,

My name is Kayla Keen. I am a DoD civilian employee, currently pursuing my PhD in Computer Science at the Naval Postgraduate School (NPS). I am trying to narrow down a topic for my dissertation research and am particularly interested in attribution information gained from binaries. I found your research in my deep dive, and was interested in learning more. Please let me know if you are interested in collaborating; I would be happy to set up a short meeting.

R, Kayla Kayla Ke<u>en</u>

knkeen@nps.edu kayla.keen@navy.mil

From: Toon, John D [john.toon@comm.gatech.edu] Sent: Thursday, November 16, 2017 6:00 PM To: Keen, Kayla (CIV) Cc: kayla.keen@navy.mil

Subject: RE: DoD Employee looking for contact info (Cyber Attribution Team)

Hi Kayla,

Thanks for your interest. I might suggest you contact Manos Antonakakis. He's a professor in our School of Electrical Engineering and one of the principal researchers involved in the work. <u>manos@gatech.edu</u>

From: Keen, Kayla (CIV) [mailto:knkeen@nps.edu] Sent: Thursday, November 16, 2017 7:59 PM To: Toon, John D <<u>john.toon@comm.gatech.edu</u>> Cc: kayla.keen@navy.mil

Subject: DoD Employee looking for contact info (Cyber Attribution Team) John,

I saw you listed as a POC in the following article: <u>http://www.rh.gatech.edu/news/584327/17-million-</u> contract-will-help-establish-science-cyber-attribution From: Keromytis, Angelos<angelos.keromytis@darpa.mil>

Sent on: Thursday, July 26, 2018 9:06:36 PM

To: Manos Antonakakis<manos@gatech.edu>; tejas@kududyn.com

CC: Schneck, Christopher (contr-i2o)<christopher.schneck.ctr@darpa.mil>

Subject: Fwd: Lazarus Activity - RFI

Attachments: catch22.txt (748 Bytes)

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, November 30, 2018 4:40:52 PM To: Manos Antonakakis <manos@gatech.edu> Subject: Fwd: Message Notification

Begin forwarded message:

From: Mail Delivery System <MAILER-DAEMON@mailgate3.darpa.mil<mailto:MAILER-DAEMON@mailgate3.darpa.mil>> Date: November 30, 2018 at 11:38:03 EST To: <jonathan.smith@darpa.mil<mailto:jonathan.smith@darpa.mil>>, <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>, <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>> Subject: Message Notification

Dear ITS Customer:

We regret that an email message sent to you from "Antonakakis, Manos" <manos@gatech.edu<mailto:manos@gatech.edu>> with a subject of Final slide deck for PI meeting could not be delivered as it exceeds the 40MB email attachment limit on the DARPA Unclassified Network.

Please request that the sender deliver the file to you via another method.

If you have any questions or concerns or require assistance with other methods to deliver the file, please contact the ITS Help Desk at (703) 527-5527 (Toll-free 1-888-562-6742) or send a message to Action@darpa.mil< <u>mailto:Action@darpa.mil</u>>.

Respectfully,

ITS Customer Support

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, August 25, 2017 6:00:02 PM To: manos@gatech.edu Subject: Fwd: Nomination

I told them no, but the timing of this is funny given our recent conversation :) -Angelos

Begin forwarded message:

From: "Stony Brook University CEAS - Chair, Department of Computer Science" <SBU.ChairCS@russellreynolds.com<mailto:SBU.ChairCS@russellreynolds.com>> Subject: Nomination Date: August 24, 2017 at 4:14:21 PM EDT To: "angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>" <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>

Dear Dr. Keromytis,

On behalf of the Search Committee for the next Chair of the Department of Computer Science at Stony Brook University, we are delighted to inform you that you have been nominated as a candidate for this important leadership position. The Search Committee has solicited nominations from individuals for whom they have high regard, and your name has been suggested to us with great enthusiasm as one who would be an outstanding chair.

An academic unit of the College of Engineering and Applied Sciences, the Department of Computer Science (CS) is ranked within the top tier (#40) of national universities by U.S. News and World Report, and the National Research Council ranks CS among the top 10% of computer science graduate programs in the U.S. In the most recent Gourman report of undergraduate computer science programs, Stony Brook was ranked 15th in the U.S. and second in New York State. The Computer Science department has seen a substantial increase in majors as enrollment has grown from 678 undergraduates in 2012 to over 1,100 today. Computer Science is now the third largest undergraduate major on campus. With annual research expenditures of approximately \$8 million, the department is home to 42 tenured and tenure-track faculty members, 10 teaching and research faculty, and 500 graduate students (200 of which are Ph.D. students). Many of the faculty are engaged in multidisciplinary research with colleagues in Stony Brook's School of Medicine and the nearby Brookhaven National Laboratory and Cold Spring Harbor Lab.

In 2015, the department opened a 70,000 square-foot, state-of-the-art building to accelerate growth in collaborative research. In June 2017, the College of Engineering and Applied Sciences was awarded two grants totalling \$4.5 million to recruit and retain exceptional individuals that strengthen the University's research productivity in two high economic opportunity areas of state and national significance – artificial intelligence (AI) and cybersecurity. These hires will also accelerate the development of the emergent Institute for AI-Driven Discovery & Innovation.

Reporting to the Dean, the Department Chair will provide vision and leadership for the CS department to advance its national and international reputation. Interested candidates should have a Ph.D. in computer science or a related field, as well as an outstanding record in research with a strong funding record. The successful candidate must qualify to be a Full Professor with tenure.

Click here <<u>https://russellreynoldsassociates.sharefile.com/d-sd167ba864ab43048</u>> to view the Position Specification. If you are interested in considering the opportunity, please send a copy of your CV (and any supporting materials you deem relevant), so that we may share it with the Search Committee on a strictly confidential basis. All materials should be submitted electronically to SBU.ChairCS@russellreynolds.com<mailto:SBU.ChairCS@russellreynolds.com>. If you have questions about the opportunity or process, we would be delighted to schedule a conversation with you. Alternatively, you may email your questions.

We look forward to hearing from you.

From:Keromytis, Angelos<angelos.keromytis@darpa.mil>Sent on:Monday, January 29, 2018 7:18:54 PMTo:Manos Antonakakis<manos@gatech.edu>Signed by:KEROMYTIS.ANGELOS.D.1501999799 on Monday, January 29, 2018 7:18:53 PMSubject:Fwd: Petabyte:Attachments: Nameless.txt (3.93 KB)

Begin forwarded message:

From: "Smith, Jonathan" <jonathan.smith@darpa.mil>
Date: January 29, 2018 at 13:39:52 EST
To: "Keromytis, Angelos" <angelos.keromytis@darpa.mil>, "Patel, Tejas (contr-i2o)" <
tejas.patel.ctr@darpa.mil>
Subject: FW: Petabyte:

SuperStorage Server 6048R-E1CR90L

My System December 17th, 8:57 pm EST

Configured Price: \$92,861.00

Selection Summary

Barebone

Supermicro SuperStorage Server 6048R-E1CR90L - 90x SATA/SAS - LSI 3008 12G SAS - Quad 10-Gigabit SFP+ - 1000W Redundant

Processor

2 x Twenty-Two-Core Intel Xeon Processor E5-2699A v4 2.40GHz 55MB Cache (145W)

Memory

8 x 64GB PC4-19200 2400MHz DDR4 ECC Registered DIMM

From: Antonakakis, Manos<manos@gatech.edu>
Sent on: Wednesday, July 10, 2019 8:28:24 PM
To: Ian Crone<ian.crone@darpa.mil>
BCC: Antonakakis, Manos<manos@gatech.edu>
Subject: [Fwd: Fw: connection for briefing on Enhanced Attribution]

This is the email. In this context I am reading the "program die" as the transition actually being killed (due to the entire context of this thread).

Maybe I am just reading into this too much.

------ Forwarded Message ------From: "Antonakakis, Manos" <manos@gatech.edu> To: Ian Crone <ian.crone@darpa.mil> Subject: Fw: connection for briefing on Enhanced Attribution Date: Wed, 3 Jul 2019 08:37:52 -0400

FYI-

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: McConnell, Kirk (Armed Services) <Kirk_McConnell@armed-services.s enate.gov> Sent: Saturday, June 29, 2019 10:17 AM To: Rodney Joffe Cc: Antonakakis, Manos Subject: Re: connection for briefing on Enhanced Attribution

I believe that Farrell would rather see the program die than work with Congress.

Sent from my iPhone

On Jun 29, 2019, at 12:39 AM, Rodney Joffe <rjoffe@centergate.com<mailt o:rjoffe@centergate.com>> wrote:

Jeez

What a piece of work! Glad you don't have any influence with DARPA's budget that Michael relies on.

Manos?

On Jun 29, 2019, at 12:31 AM, McConnell, Kirk (Armed Services) <Kirk_Mc Connell@armed-services.senate.gov<mailto:Kirk_McConnell@armed-services. senate.gov>> wrote:

Well, Michael is quite a guy isn't he?

Sent from my iPhone

Begin forwarded message:

From: "Farrell, Michael" <michael.farrell@iisp.gatech.edu<mailto:michae l.farrell@iisp.gatech.edu>> Date: June 28, 2019 at 4:41:00 PM EDT To: "McConnell, Kirk (Armed Services)" <Kirk_McConnell@armed-services.s enate.gov<mailto:Kirk McConnell@armed-services.senate.gov>>> Cc: Ian Crone <ian.crone@darpa.mil<mailto:ian.crone@darpa.mil>>, "lisa. heyes@darpa.mil<mailto:lisa.heyes@darpa.mil>" <lisa.heyes@darpa.mil<mai lto:lisa.heyes@darpa.mil>> Subject: Re: connection for briefing on Enhanced Attribution

Kirk,

Thanks for your interest in Georgia Tech research. However, we (GT) have no comment or position on the below. In fact, going forward please contact DARPA directly about any and all issues or questions or comments related to the enhanced attribution program. The DARPA congressional liaison and program manager are copied on this message and can respond, as needed. The Georgia Tech/GTRI PI and Co-PIs on this research program are not the appropriate POCs for any questions, comments, or concerns.

The government, not GT, makes decisions related to funding and transition from research at DARPA to other entities. The focus of Manos, myself and other Co-PIs is completely on doing impactful research. We follow contractual requirements and relevant policies for our part of this program (and GT is only one part), and devote our energy to 'creating the next' in cyber security.

Best,

Michael

On Jun 25, 2019, at 12:24, McConnell, Kirk (Armed Services) <Kirk McCon nell@armed-services.senate.gov<mailto:Kirk_McConnell@armed-services.sen ate.gov>> wrote:

FYI. Andy is on the SAC-D staff. Andrew Pahutski from SCO is seeking approval from us on the Hill to shift some SCO money to Enhanced Attribution.

From: McConnell, Kirk (Armed Services) Sent: Tuesday, June 25, 2019 12:22 PM To: Heyes, Lisa (lisa.heyes@darpa.mil<mailto:lisa.heyes@darpa.mil>) <li sa.heyes@darpa.mil<mailto:lisa.heyes@darpa.mil>>; Vanlandingham, Andy (Appropriations) < Andy Vanlandingham@appro.senate.gov<mailto:Andy Vanla ndingham@appro.senate.gov>> Subject: connection for briefing on Enhanced Attribution

Lisa –

Andy Vanlandingham is interested in learning more about DARPA's Enhanced Attribution cybersecurity program. It turns out that a current SCO program manager whom we know well is moving over to Cyber Command to help with the transition of this DARPA program to CYBERCOM. Thanks, Kirk

Manos Antonakakis | Associate Professor | manos@gatech.edu School of Electrical and Computer Engineering Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, Manos

Sent on: Friday, May 18, 2018 12:45:39 AM

To: Mitchell, Michael F<michael.mitchell@ece.gatech.edu>; Hall, John<John.Hall@team.neustar>

CC: Joffe, Rodney<Rodney.Joffe@team.neustar>

Subject: HACCS add on for Neustar

Michael, please work with John to make sure that Neustar gets the add on that we discussed.

John, Michael will be working with Allison (from DARPA) to make everything happen for Neustar. Michael will also navigate the internal GT process on your behalf. Please work with him, as he needs more information from you. Please, follow Michael's lead.

Rodney, GT is closing the fiscal year. This will have to wait until the new fiscal year kicks in (Michael, is this June or July 1st?).

Thanks,

From: Sussmann, Michael A. (Perkins Coie)<MSussmann@perkinscoie.com>

Sent on: Thursday, April 12, 2018 4:01:46 PM

To: Antonakakis, Manos<manos@gatech.edu>

CC: Lisa Hook<lisa.hook@team.neustar>; Rodney Joffe<rodney.joffe@team.neustar>

Subject: Re: [EXTERNAL] Re: Intro

Manos,

Rodney is helping me prepare a proposal and description of the commercial services that you plan to offer in July or thereafter. Rodney is tied up today, but has time to help me this evening. I was merely reaching out to you on the chance that you had some time today to help get started and thereby make my work with Rodney this evening go quicker. I'll connect with Rodney later, and one of us will let you know if we need anything from you in this regard.

Safe travels, and thanks for your responsiveness. I look forward to meeting you.

Michael

On Apr 12, 2018, at 11:53 AM, Rodney Joffe <rodney.joffe@team.neustar> wrote:

Hi Manos,

Glad to know that you are on your way to DC.

Let's try meet up while you are here, you, me and Michael.

Then we can talk through everything :-). Better than email.

What is yoru DC schedule?

> On Apr 12, 2018, at 11:51 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Lisa, I just boarded a flight to DC, where I will spend the rest of my day with meetings at DARPA. Tomorrow, my entire day will be spend at the HACCS kickoff meeting where I will be presenting the 4 years research agenda of the program.

>

> Michael, nice to meet you. I can get on a call today between 17.00 and 18.00, tomorrow after 20.00 and over the weekend anytime you want. All times are EST.

>

> To be totally honest, I would like to clarify what the request is here as a first step. What I sent Rodney was discoveries of malicious activities in the AU networks as part of technology we are creating for the USG. This is not technology that is related with Neustar — beyond the fact that we used your data.

>

> Could Neustar offer something similar? Sure, since you have the data. :) However, what GT is doing (the technology we are generating) is for the USG (DoD to be precise).

>

> Thanks and hopefully this message clarifies things a bit.

>

> Manos

>----

> Typos due to mobile device ...

>

>> On Apr 12, 2018, at 11:39, Hook, Lisa lisa.hook@team.neustar> wrote:

>>

>> Manos meet Michael,

>>

>> Michael is our longtime outside counsel on national security and other issues. He is working with Rodney on a proposal to provide analytics similar to what you are doing in Australia.

>>

From: Rodney Joffe <rodney.joffe@team.neustar></rodney.joffe@team.neustar>	
Sent on: Friday, February 12, 2021 7:57:09 PM	
To: Antonakakis, Manos <manos@gatech.edu></manos@gatech.edu>	
CC: Mitchell, Michael F <michael.mitchell@ece.gatech.edu></michael.mitchell@ece.gatech.edu>	
Subject: Re: Data subscription extension	
Hi Manos and Michael,	
We think we have accurately completed the registration form. Please let me know if there is anything else needed.	
Thanks!	
Rodney	
> On Feb 12, 2021, at 11:51 AM, Antonakakis, Manos <manos@gatech.edu> wrote:</manos@gatech.edu>	
> OK, let start asap. I cannot go back to DARPA and say that I cannot do this because GT is not moving fast enoug will lose face.	jh. l
>	
> > Manos	
> Marios	
>	
>	
 > From: Mitchell, Michael F <michael.mitchell@ece.gatech.edu></michael.mitchell@ece.gatech.edu> > Date: Friday, February 12, 2021 at 11:31 AM > To: Antonakakis, Manos <manos@gatech.edu>, Rodney Joffe <rodney.joffe@team.neustar></rodney.joffe@team.neustar></manos@gatech.edu> > Oct inste DF_ Date replaced intervent environment 	
> Subject: RE: Data subscription extension	
> Manos,	
>	
> It really depends on how quickly the subsidiary is able to get registered in the system (outside of our control), send the quote, and how responsive they are to the inquiries and requests for documentation that procurement needs. I vertice say probably 3 weeks on the short side accounting for some back and forth between supplier and contracting office >	would
>	
> Rodney,	
>	
> Vould you please have the new company register as a vendor in our system. No action on our part can be compl until we have the quote and the new company's registration is done. This link will allow for a new account to be set including routing details for payments on future invoices. A new PO will be issued.	
>	
>	
https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwd5.myworkdaysite.com%2Fsupplier%2Fga	atech%2F
>	
> > Let me know if you have questions!	
> Let the know if you have questions:	
>	
> 	
> M	
>	
>	
>	

message in error and any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify us immediately and delete the original message

On 5/17/18, 8:45 PM, "Antonakakis, Manos" <manos@gatech.edu> wrote:

>Michael, please work with John to make sure that Neustar gets the add >on that we discussed.

>

>John, Michael will be working with Allison (from DARPA) to make >everything happen for Neustar. Michael will also navigate the internal >GT process on your behalf. Please work with him, as he needs more >information from you. Please, follow Michael's lead.

>

>Rodney, GT is closing the fiscal year. This will have to wait until the >new fiscal year kicks in (Michael, is this June or July 1st?).

>

>Thanks,

>
>Manos Antonakakis | manos@gatech.edu
>Georgia Institute of Technology
>FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>

> >

>On 5/17/18, 8:45 PM, "Antonakakis, Manos" <manos@gatech.edu> wrote:

>

>>Michael, please work with John to make sure that Neustar gets the add >>on that we discussed.

>>

>>John, Michael will be working with Allison (from DARPA) to make >>everything happen for Neustar. Michael will also navigate the internal >>GT process on your behalf. Please work with him, as he needs more >>information from you. Please, follow Michael's lead.

>>

>>Rodney, GT is closing the fiscal year. This will have to wait until the >>new fiscal year kicks in (Michael, is this June or July 1st?).

>> >>Thanks,

>>

>><

>>Manos Antonakakis | manos@gatech.edu

>>Georgia Institute of Technology

>>FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>>

>

From: Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, Manos

Sent on: Monday, July 23, 2018 8:28:51 PM

To: Mitchell, Michael F<michael.mitchell@ece.gatech.edu>; Hall, John<John.Hall@team.neustar>

CC: Joffe, Rodney<Rodney.Joffe@team.neustar>

Subject: Re: HACCS program updates

Michael, many thanks for the update. Per our discussion, I would like to be CCed on all further communications you have with Neustar about both EA or HACCS issues. I would suggest you include Rodney on these emails too.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Mitchell, Michael F Sent: Monday, July 23, 2018 2:49:32 PM To: Hall, John Cc: Antonakakis, Manos Subject: HACCS program updates

Hey John,

I just got off the phone with Dan Sibble, who is the contracting contact for Georgia Tech in charge of the HACCS program. I have briefed him on the situation and how time sensitive it is and the difficulties involved for everyone. He has agreed to push the addendum in front of his leadership team to try and accelerate the negotiations between GT and DARPA. I have requested that he update me as quickly as possible on this, and I in turn will update you as things happen.

My apologies for the confusion on this. I hope to have some additional information for you shortly.

Thanks!

Michael Mitchell

Research Operations Program Manager GEORGIA Institute of TECH nology School of Electrical and Computer Engineering 777 Atlantic Drive NW Atlanta, GA 30332-0765 Phone: 404-385-8122 From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Wednesday, July 31, 2019 1:17:13 AM

To: Rodney Joffe<rjoffe@packetforensics.com>; Lily Kim<Lily.Kim@microsoft.com>

- CC: Kirk McConnell<Kirk_McConnell@armed-services.senate.gov>; Victor Oppleman<victor@packetforensics.com>; Ashfia Rahman<asrahma@microsoft.com>; Christian Cook<Christian.Cook@microsoft.com>; Lisa Patel<lpatel@centergate.com>
- BCC: Antonakakis, Manos<manos@gatech.edu>

Subject: Re: introduction

Kirk, thanks for the intros.

Lily, pleased to meet you!

This Friday works for me. The week after the next I will be hosting a hackathon at GT for DARPA, so my schedule will be less flexible. If you come up with a date, I will try to make it work but I cannot promise that I will be able to.

Many thanks,

--

Manos Antonakakis | Associate Professor | manos@gatech.edu School of Electrical and Computer Engineering Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From:Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, ManosSent on:Tuesday, May 1, 2018 2:19:28 PMTo:Chung, Diana (contr-i2o)<diana.chung.ctr@darpa.mil>Subject:Re: Need CV ASAP by 1pm ESTAttachments: ManosAntonakakis-CV-050118.pdf (113.21 KB)

Hey Diana, please let me know if the attached will suffice.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Chung, Diana (contr-i2o) <diana.chung.ctr@darpa.mil> Sent: Tuesday, May 1, 2018 8:46:15 AM To: Antonakakis, Manos Subject: Re: Need CV ASAP by 1pm EST

Thanks!

Diana

>>

```
> On May 1, 2018, at 8:45 AM, Antonakakis, Manos <manos@gatech.edu> wrote:
>
> Yes, Diana. I will send you my CV the moment I am done driving into Georgia Tech.
>
> Many thanks for nominating me :)
>
> ----
> Typos due to mobile device ...
>
>> On May 1, 2018, at 08:42, Chung, Diana (contr-i2o) <diana.chung.ctr@darpa.mil> wrote:
>>
>> Hi!
>>
>> JMS wanted to nominate you for the DARPA risers but he did not forward me your updated CV and full contact info
(name, email, address, phone number).
>>
>> Can you get that to me by 1pm today? Your package is incomplete if I don't have that information!
>>
>> Thanks,
>> Diana
```

From: Antonakakis, Manos<fvirgil6@gatech.edu> on behalf of Antonakakis, Manos

Sent on: Tuesday, February 12, 2019 4:10:03 AM

To: Rodney Joffe<rodney.joffe@team.neustar>; Christopher Schneck<christopher.schneck.ctr@darpa.mil>

BCC: Antonakakis, Manos<manos@gatech.edu>

Subject: Re: Neustar Executive Visit to PI meeting March 8th

Thanks you Rodney for the email.

For you guys to attend the site visit I will need to get the green light from Chris. Chris, can you please check and let us know if you have any issues with this?

Thanks, Manos

Typos due to mobile device ...

> On Feb 11, 2019, at 21:06, Rodney Joffe <rodney.joffe@team.neustar> wrote:

>

> Hello Manos,

>

> As you know Neustar has been very involved in developing and improving our ability to provide capabilities and resources for you based on the apparent success of your EA and HACCS programs, using our data.

>

> As a result, I wonder if it would be possible for me, our CEO Charlie Gottdiener, Venkat Achanta, our Chief Data Officer, and Adm. (Ret) Mike Mullen (past Chairman of the Joint Chiefs) who is a board director of our data subsidiary to visit you during the PI day on March 8th?

>

> I think it would be extremely beneficial for my colleagues to see and understand the impact of our efforts, and to realize just how much of a difference we can make to the country's National Security efforts through GA Tech.

> They all obviously understand the sensitivity of the PI briefing and meeting, and would respect and sign whatever attendee documents are required of other sub-contractors on your program.

>

> Respectfully

>

> Rodney

> >========

> Rodney Joffe

- > National Security Executive
- > Neustar, Inc.
- > 21575 Ridgetop Circle
- > Sterling VA 20166
- >USA
- >+1 202-533-2900 Direct
- >+1 602-418-6471 Cell
- > rodney.joffe@team.neustar

>

> SVP, Senior Technologist, and Fellow

From: Rodney Joffe<rodney.joffe@team.neustar>

Sent on: Tuesday, March 16, 2021 7:02:01 PM

To: Kline, Allison<allison.kline@darpa.mil>

CC: Chris Schneck<christopher.schneck.ctr@darpa.mil>; Antonakakis, Manos<manos@gatech.edu>

Subject: Re: New DARPA EA PM

> On Mar 11, 2021, at 7:43 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Hey Rodney, >

> Allow me to re-introduce to Allison, who is the new EA PM. I think it would be a great idea for the two of you to get on a call and catch up about the status of things.

Thanks Manos,

Hello again Allison.

Let me know when.

Regards Rodney Rodney Joffe SVP, and Fellow National Security Executive Neustar, Inc. 45980 Center Oak Plaza Sterling VA 20166 USA +1 202-533-2900 Direct +1 602-418-6471 Cell rodney.joffe@team.neustar > > Thanks, >

> ____

> Manos Antonakakis, Ph.D. | manos@gatech.edu

> College of Engineering Dean's Professorship Chair and Associate Professor

> Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS)

> School of Electrical and Computer Engineering | Georgia Institute of Technology

> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>>

- >> Manos,
- >>

>> Do you have any other information from DARPA program managers chasing possible path for this fiscal funding ? >>

- >> Thank you.
- >>
- >> Venkat.

>

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Saturday, August 5, 2017 9:39:25 PM To: Rodney Joffe <rjoffe@centergate.com> Subject: Quick note about a recent data outage

Hey Rodney,

Not sure if your team has realized this already (I suspect you have), but there is a 40 hours or so outage on the datasets we are getting from you starting on 08/02/2017.

I am writing this email for two reasons. Primarily, I would like to know if this could happen again. Such a long outage going unnoticed by your team makes me very skeptical about the long-term quality of your datastes. How such a major issue doesn't get remediated in the fist few hours of the outage? Allow me to remind you that this is a 4.5 years project we are working on. Should I be implementing mechanisms that will give *your* team a heads up when something goes wrong? Sounds like not the right thing to be doing (as you are the provider of the datastes not me), but this project needs to be successful for all of us --- me as GT and you as Neustar.

This gives me the right context to bring up the second reason I am writing this email. We are working with a USG partner, where we are statistically monitor the movement of an unknown (to date) threat actor targeting sensitive USG networks. This almost 2 days gap of your data will create a huge gap in our statistical reasoning. In other words, we will have to disclose that for those two days, we have little idea what the actor did due to a failure of the underline data sources. This will be a black mark for Neustar. It is a shame that besides the USG partner, this report will be likely attract the interest of the people in the highest levels of DARPA and likely DoD.

All in all, I would like to remind you that, while we are appreciative of the data you are sharing with us, not providing a reliable service would likely cause both; the project to be less successful but also a significant financial damage to Neustar at the end of the day. This is mainly because through our analysis Neustar would appear as a less than reliable (for the capabilities we develop at GT) data source. I do not think that Neustar would like GT to build unique new capabilities for the USG and then the USG to try to seek a more reliable sources of data to apply our algorithms over. That sounds like a unique opportunity lost for Neustar.

I would appreciate some official feedback from Neustar on this.

Best regards,

Manos Antonakakis | manos@gatech.edu FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, April 17, 2018 4:35:35 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, April 17, 2018 4:35:34 PM Subject: Re: .army and .navy TLDs are running phish Attachments: Nameless.txt (1.16 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, April 17, 2018 5:22:30 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, April 17, 2018 5:22:29 PM Subject: Re: .army and .navy TLDs are running phish Attachments: Nameless.txt (2.53 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, April 17, 2018 4:34:02 PM To: Smith, Jonathan <jonathan.smith@darpa.mil> CC: Antonakakis, Manos <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, April 17, 2018 4:34:01 PM Subject: Re: .army and .navy TLDs are running phish Attachments: Nameless.txt (1.43 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, April 17, 2018 4:00:14 PM To: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> Subject: Re: .army and .navy TLDs are running phish

And, it terns out there is a dynamic DNS service (!!!!) running under dns[.]army and dns[.]navy through here:

https://dynv6.com/

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Tuesday, April 17, 2018 10:39:41 AM To: Keromytis, Angelos D CIV DARPA (US); Smith, Jonathan Subject: .army and .navy TLDs are running phish

Gents, evidently Rightside / Demand Media took over these two TLDs (and .airforce) and they are evidence of phishing campaigns out of them.

https://www.virustotal.com/en/domain/dns.army/information/

https://www.virustotal.com/en/domain/dns.navy/information/

Is there any interest in running this down from the attribution point of view?

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, April 17, 2018 3:30:11 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, April 17, 2018 3:30:10 PM Subject: Re: .army and .navy TLDs are running phish Attachments: Nameless.txt (652 Bytes) From: Rodney Joffe <rodney.joffe@team.neustar> Sent on: Monday, November 13, 2017 3:16:24 PM To: Manos Antonakakis <manos@gatech.edu> Subject: Re: [EXTERNAL] Fw: EA PI Meeting: 1 December 2017 (Friday) at the DCC --- Response needed by COB on 27 November 2017

Got it.

> The registration process for this PI meeting will be different from previous ones. Rather than going through a registration website, we're requesting that each PI respond to Tom Maddern (thomas.maddern.ctr@darpa.mil) with the names, organizations, and countries of citizenship for each of your team members planning on attending. Please provide this information by COB Monday, November 27th.

Rodney Joffe Neustar United States

>

> Each individual attending will need to bring a completed DARPA Form 104 (attached) along with a government issued ID to the meeting. Non-US citizens will need to submit a DARPA Form 60 (attached) in advance.
 I have downloaded, and will bring printed copy with me.

From: Rodney Joffe <rodney.joffe@team.neustar> Sent on: Wednesday, November 8, 2017 7:59:06 PM To: Manos Antonakakis <manos@gatech.edu> Subject: Re: [EXTERNAL] Fw: Notification HR001117S0051-HACCS-FP-029

Damn awesome!!!!! I will tell them now.

> On Nov 8, 2017, at 2:53 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Great news Rodney, we got the official notification that we won HACCS! Please relay the news internally to your team.

- >
- > Cheers,
- >
- > —
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- > >

- > Sent: Wednesday, November 8, 2017 12:31 PM
- > To: Antonakakis, Manos; Farrell, Michael D
- > Cc: HACCS

> Subject: Notification HR001117S0051-HACCS-FP-029

- >
- > Dear Proposer,
- >

> Please see the attached file regarding your proposal submission (HR001117S0051-HACCS-FP-029) that was submitted to the Harnessing Autonomy for Countering Cyberadversary Systems (HACCS) solicitation.

>

- > Regards,
- >
- > DARPA/I2O
- > <Letter 029.pdf>

> From: HACCS <haccs@darpa.mil>

```
>
> ----
> Typos due to mobile device ...
>
>> On Apr 12, 2018, at 12:10, Rodney Joffe <rodney.joffe@team.neustar> wrote:
>>
>> After you are done is fine. Michael, when Manos calls, I will add you to the call.
>>
>>
>>> On Apr 12, 2018, at 12:08 PM, Antonakakis, Manos <manos@gatech.edu> wrote:
>>>
>>> I land at 14.00. I am on a telephone call with Jason Livingood from Comcast until 14.30, and by then I should be
walking into the Darpa building. You need me to call you then or after I am done with my meetings?
>>>
>>> ----
>>> Typos due to mobile device ...
>>>
>>>> On Apr 12, 2018, at 12:06, Rodney Joffe <rodney.joffe@team.neustar> wrote:
>>>>
>>>> Guys.
>>>>
>>>> You are talking at cross purposes.
>>>>
>>>> Manos, what time do you land at DCA? I will make sure I can get out of my meeting and talk by phone,
>>>>
>>>> Michael, please stand down now.
>>>>
>>>>
>>>>
>>>> On Apr 12, 2018, at 12:04 PM, Antonakakis, Manos <manos@gatech.edu> wrote:
>>>>>
>>>>> I am sorry Michael, but I have no idea what you are talking about. Perhaps a call is in order.
>>>>>
>>>> Thanks, Manos
>>>>>
>>>> ----
>>>> Typos due to mobile device ...
>>>>>
>>>>> On Apr 12, 2018, at 12:02, Sussmann, Michael A. (Perkins Coie) <MSussmann@perkinscoie.com> wrote:
>>>>>>
>>>>> Manos,
>>>>>>
>>>>> Rodney is helping me prepare a proposal and description of the commercial services that you plan to offer in
July or thereafter. Rodney is tied up today, but has time to help me this evening. I was merely reaching out to you on the
chance that you had some time today to help get started and thereby make my work with Rodney this evening go
quicker. I'll connect with Rodney later, and one of us will let you know if we need anything from you in this regard.
>>>>>>
>>>>> Safe travels, and thanks for your responsiveness. I look forward to meeting you.
>>>>>>
>>>>> Michael
>>>>>>
>>>>>>
>>>>> On Apr 12, 2018, at 11:53 AM, Rodney Joffe <rodney.joffe@team.neustar> wrote:
>>>>>>
>>>>> Hi Manos,
>>>>>>
>>>>> Glad to know that you are on your way to DC.
```

>>>>>> >>>>> Let's try meet up while you are here, you, me and Michael. >>>>>> >>>>> Then we can talk through everything :-). Better than email. >>>>>> >>>>> What is yoru DC schedule? >>>>>> >>>>>> >>>>>> On Apr 12, 2018, at 11:51 AM, Antonakakis, Manos <manos@gatech.edu> wrote: >>>>>>> >>>>>> Lisa, I just boarded a flight to DC, where I will spend the rest of my day with meetings at DARPA. Tomorrow, my entire day will be spend at the HACCS kickoff meeting where I will be presenting the 4 years research agenda of the program. >>>>>>> >>>>>> Michael, nice to meet you. I can get on a call today between 17.00 and 18.00, tomorrow after 20.00 and over the weekend anytime you want. All times are EST. >>>>>>> >>>>>> To be totally honest, I would like to clarify what the request is here as a first step. This is not technology that is related with Neustar — beyond the fact that we used your data. >>>>>>> >>>>>> Could Neustar offer something similar? Sure, since you have the data. :) However, what GT is doing (the technology we are generating) is for the USG (DoD to be precise). >>>>>>> >>>>>> Thanks and hopefully this message clarifies things a bit. >>>>>>> >>>>> Manos >>>>> --->>>>>> Typos due to mobile device ... >>>>>>> >>>>>>> >>>>>>> Manos meet Michael, >>>>>>> a proposal to provide analytics similar to what you are doing in Australia. >>>>>>>> provide so he can write up a proposal. >>>>>>>> >>>>>>> Hoping you two can jump on the phone asap. >>>>>>> >>>>>> Thanks -- Lisa >>>>>>> >>>>>>>>> >>>>>> Lisa A. Hook >>>>>> >>>>>> >>>>> >>>>>>

>>>>> NOTICE: This communication may contain privileged or other confidential information. If you have received it in error, please advise the sender by reply email and immediately delete the message and any attachments without copying or disclosing the contents. Thank you.

From: Antonakakis, Manos <manos@gatech.edu> Sent on: Thursday, April 12, 2018 6:52:48 PM To: Rodney Joffe <rjoffe@centergate.com> Subject: Re: [EXTERNAL] Re: Intro If you see this in the next 5 minutes call me. Typos due to mobile device ... > On Apr 12, 2018, at 12:34, Rodney Joffe <rjoffe@centergate.com> wrote: > > Manos, > > Calm down. Take deep breaths. > > Lisa dn Michael jumped the gun without telling me what they were planning, before I could discuss with you. > I UNDERSTAND the situation. > > This is Lisa confusing Notos and GT and your dual role, which you should have expected. > > Lets talk when you get done with DARPA. > > >> On Apr 12, 2018, at 12:17 PM, Antonakakis, Manos <manos@gatech.edu> wrote: >> >> Cool. >> >> For the record, let me remind everybody that GT is Neustar's customer with the respect of EA and very soon HACCS programs. This means that we are buying your data so we can conduct research and validate our algorithms. It is only fair to assume that if we find malice in your data we have an ethical responsibility to report it to you. >> >> We are not (as GT) in business to create services or anything along these lines. Even more important is the fact that any technology transfer (when possible) should take place under the proper technology transition mechanisms provided by GT. >> >> As far as I am concerned, our GT - Neustar contractual obligations begin and ends in the existing data sharing agreements in place. >> >> Thanks, Manos >> >> ---->> Typos due to mobile device ... >> >>> On Apr 12, 2018, at 12:10, Rodney Joffe <rodney.joffe@team.neustar> wrote: >>> >>> After you are done is fine. Michael, when Manos calls, I will add you to the call. >>> >>> >>>> On Apr 12, 2018, at 12:08 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>>>>

>>>> I land at 14.00. I am on a telephone call with Jason Livingood from Comcast until 14.30, and by then I should be walking into the Darpa building. You need me to call you then or after I am done with my meetings?

>>>> >>>> ---->>>> Typos due to mobile device ... >>>> >>>> On Apr 12, 2018, at 12:06, Rodney Joffe <rodney.joffe@team.neustar> wrote: >>>>> >>>> Guys. >>>>> >>>> You are talking at cross purposes. >>>>> >>>>> Manos, what time do you land at DCA? I will make sure I can get out of my meeting and talk by phone, >>>>> >>>> Michael, please stand down now. >>>>> >>>>> >>>>> >>>>> On Apr 12, 2018, at 12:04 PM, Antonakakis, Manos <manos@gatech.edu> wrote: >>>>>> >>>>> I am sorry Michael, but I have no idea what you are talking about. Perhaps a call is in order. >>>>>> >>>>> Thanks, Manos >>>>>> >>>>> ---->>>>> Typos due to mobile device ... >>>>>> >>>>>> On Apr 12, 2018, at 12:02, Sussmann, Michael A. (Perkins Coie) <MSussmann@perkinscoie.com> wrote: >>>>>>> >>>>> Manos, >>>>>>> >>>>>> Rodney is helping me prepare a proposal and description of the commercial services that you plan to offer in July or thereafter. Rodney is tied up today, but has time to help me this evening. I was merely reaching out to you on the chance that you had some time today to help get started and thereby make my work with Rodney this evening go guicker. I'll connect with Rodney later, and one of us will let you know if we need anything from you in this regard. >>>>>>> >>>>>> Safe travels, and thanks for your responsiveness. I look forward to meeting you. >>>>>>> >>>>> Michael >>>>>>> >>>>>>> >>>>>> On Apr 12, 2018, at 11:53 AM, Rodney Joffe <rodney.joffe@team.neustar> wrote: >>>>>>> >>>>>> Hi Manos, >>>>>>> >>>>>> Glad to know that you are on your way to DC. >>>>>>> >>>>>> Let's try meet up while you are here, you, me and Michael. >>>>>>> >>>>>> Then we can talk through everything :-). Better than email. >>>>>>> >>>>>> What is yoru DC schedule? >>>>>>> >>>>>>> >>>>>>>> >>>>>> Lisa, I just boarded a flight to DC, where I will spend the rest of my day with meetings at DARPA. Tomorrow, my entire day will be spend at the HACCS kickoff meeting where I will be presenting the 4 years research agenda of the

program.

From: Antonakakis, Manos <manos@gatech.edu> Sent on: Thursday, April 12, 2018 4:59:48 PM To: Rodney Joffe <rodney.joffe@team.neustar> CC: Lisa Hook <lisa.hook@team.neustar>; Michael Sussmann <MSussmann@perkinscoie.com> Subject: Re: [EXTERNAL] Re: Intro

Packed really badly.

I can try to escape early today and meet you by the darpa area around 16.00 or after 22.00 at the Arlington Hilton hotel.

Tomorrow I can meet you at the Arlington Hilton hotel 7.00am (or earlier) but I have a hard stop at 8.00am — as I need to head out to DARPA. My flight to Atlanta leaves at 18.00 so, I could probably meet with you at 15.00 outside darpa for an hour just before I head out.

Typos due to mobile device
> On Apr 12, 2018, at 11:53, Rodney Joffe <rodney.joffe@team.neustar> wrote:</rodney.joffe@team.neustar>
>
> Hi Manos,
>
> Glad to know that you are on your way to DC.
>
> Let's try meet up while you are here, you, me and Michael.
>
> Then we can talk through everything :-). Better than email.
>
> What is yoru DC schedule?
>
>
>> On Apr 12, 2018, at 11:51 AM, Antonakakis, Manos <manos@gatech.edu> wrote:</manos@gatech.edu>
>>
>> Lisa, I just boarded a flight to DC, where I will spend the rest of my day with meetings at DARPA. Tomorrow, my entire day will be spend at the HACCS kickoff meeting where I will be presenting the 4 years research agenda of the program.
>>
>> Michael, nice to meet you. I can get on a call today between 17.00 and 18.00, tomorrow after 20.00 and over the weekend anytime you want. All times are EST.
>>
>> To be totally honest, I would like to clarify what the request is here as a first step. This is not technology that is
related with Neustar — beyond the fact that we used your data.
>>
>> Could Neustar offer something similar? Sure, since you have the data. :) However, what GT is doing (the technology we are generating) is for the USG (DoD to be precise).
>>
>> Thanks and hopefully this message clarifies things a bit.
>>
>> Manos
>>
>> Typos due to mobile device
>>> On Apr 12, 2018, at 11:39, Hook, Lisa <lisa.hook@team.neustar> wrote:</lisa.hook@team.neustar>
>>> Nonce most Michael
>>> Manos meet Michael,
>>>
>>> Michael is our longtime outside counsel on national security and other issues. He is working with Rodney on a

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, April 12, 2018 8:32:35 PM To: Rodney Joffe <rjoffe@centergate.com> Subject: Re: [EXTERNAL] Re: Intro

Back online. Call me anytime before 17.30.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Thursday, April 12, 2018 1:52:48 PM To: Rodney Joffe Subject: Re: [EXTERNAL] Re: Intro

If you see this in the next 5 minutes call me.

Typos due to mobile device ...

```
> On Apr 12, 2018, at 12:34, Rodney Joffe <rjoffe@centergate.com> wrote:
```

>

> Manos,

> Calm down. Take deep breaths.

>

>

> Lisa dn Michael jumped the gun without telling me what they were planning, before I could discuss with you.

>

> I UNDERSTAND the situation.

>

> This is Lisa confusing Notos and GT and your dual role, which you should have expected.

>

> Lets talk when you get done with DARPA.

>

>

>> On Apr 12, 2018, at 12:17 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>>

>> Cool.

>>

>> For the record, let me remind everybody that GT is Neustar's customer with the respect of EA and very soon HACCS programs. This means that we are buying your data so we can conduct research and validate our algorithms. It is only fair to assume that if we find malice in your data we have an ethical responsibility to report it to you.

>>

>>

>> We are not (as GT) in business to create services or anything along these lines. Even more important is the fact that any technology transfer (when possible) should take place under the proper technology transition mechanisms provided by GT.

>> As far as I am concerned, our GT - Neustar contractual obligations begin and ends in the existing data sharing agreements in place.

```
>> Thanks, Manos
>>
>> ----
>> Typos due to mobile device ...
>>
>>> On Apr 12, 2018, at 12:10, Rodney Joffe <rodney.joffe@team.neustar> wrote:
>>>
>>> After you are done is fine. Michael, when Manos calls, I will add you to the call.
>>>
>>>
>>>> On Apr 12, 2018, at 12:08 PM, Antonakakis, Manos <manos@gatech.edu> wrote:
>>>>
>>>> I land at 14.00. I am on a telephone call with Jason Livingood from Comcast until 14.30, and by then I should be
walking into the Darpa building. You need me to call you then or after I am done with my meetings?
>>>>
>>>> ----
>>>> Typos due to mobile device ...
>>>>
>>>> On Apr 12, 2018, at 12:06, Rodney Joffe <rodney.joffe@team.neustar> wrote:
>>>>>
>>>> Guys.
>>>>>
>>>> You are talking at cross purposes.
>>>>>
>>>>> Manos, what time do you land at DCA? I will make sure I can get out of my meeting and talk by phone,
>>>>>
>>>>> Michael, please stand down now.
>>>>>
>>>>>
>>>>>
>>>>> On Apr 12, 2018, at 12:04 PM, Antonakakis, Manos <manos@gatech.edu> wrote:
>>>>>>
>>>>> I am sorry Michael, but I have no idea what you are talking about. Perhaps a call is in order.
>>>>>>
>>>>> Thanks, Manos
>>>>>>
>>>>> ---
>>>>>> Typos due to mobile device ...
>>>>>>
>>>>>> On Apr 12, 2018, at 12:02, Sussmann, Michael A. (Perkins Coie) <MSussmann@perkinscoie.com> wrote:
>>>>>>>
>>>>> Manos,
>>>>>>>
>>>>>> Rodney is helping me prepare a proposal and description of the commercial services that you plan to offer in
July or thereafter. Rodney is tied up today, but has time to help me this evening. I was merely reaching out to you on the
chance that you had some time today to help get started and thereby make my work with Rodney this evening go
quicker. I'll connect with Rodney later, and one of us will let you know if we need anything from you in this regard.
>>>>>>>
>>>>> Safe travels, and thanks for your responsiveness. I look forward to meeting you.
>>>>>>>
>>>>> Michael
>>>>>>>
>>>>>>>
>>>>>> On Apr 12, 2018, at 11:53 AM, Rodney Joffe <rodney.joffe@team.neustar> wrote:
>>>>>>>
>>>>> Hi Manos,
>>>>>>>
```

>>>>>> Glad to know that you are on your way to DC. >>>>>>> >>>>>> Let's try meet up while you are here, you, me and Michael. >>>>>>> >>>>>> Then we can talk through everything :-). Better than email. >>>>>>> >>>>>> What is yoru DC schedule? >>>>>>> >>>>>>> >>>>>>>> >>>>>> Lisa, I just boarded a flight to DC, where I will spend the rest of my day with meetings at DARPA. Tomorrow, my entire day will be spend at the HACCS kickoff meeting where I will be presenting the 4 years research agenda of the program. >>>>>>>> the weekend anytime you want. All times are EST. >>>>>>>> >>>>>> To be totally honest, I would like to clarify what the request is here as a first step. This is not technology that is related with Neustar — beyond the fact that we used your data. >>>>>>>> technology we are generating) is for the USG (DoD to be precise). >>>>>>>> >>>>>>> >>>>>> Manos >>>>> --->>>>>>>>>>> Typos due to mobile device ... >>>>>>>> on a proposal to provide analytics similar to what you are doing in Australia. provide so he can write up a proposal. >>>>>>> Thanks -- Lisa >>>>>>>>> >>>>>> Lisa A. Hook >>>>>>> >>>>>>> >>>>>> >>>>>>> >>>>>> NOTICE: This communication may contain privileged or other confidential information. If you have received it

in error, please advise the sender by reply email and immediately delete the message and any attachments without copying or disclosing the contents. Thank you.

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, April 26, 2018 8:55:29 PM To: Hall, John <John.Hall@team.neustar> CC: Joffe, Rodney <Rodney.Joffe@team.neustar> Subject: Re: [EXTERNAL] Re: Ip Intelligence for HACCS

OK, John.

It looks counterintuitive to me for this to go through GT, because of the overhead. This was the main reason (according to the BAA) why DARPA wanted the data quotes *outside* our budget --- so they will not have to pay any overhead.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Hall, John <John.Hall@team.neustar> Sent: Thursday, April 26, 2018 3:19:48 PM To: Antonakakis, Manos Cc: Joffe, Rodney Subject: Re: [EXTERNAL] Re: Ip Intelligence for HACCS

Hi Manos - I^1 ve been on calls and wasn¹t able to call you at 2. I understand the rationale behind the overhead. Let me check with the HACCS folks and see how they feel about this and I^1 II get back to you.

Thanks

John W Hall Neustar, Inc. / Sr. Director - Federal Business [T] (571) 246-2407 [E] john.hall@neustar.biz

The information contained in this e-mail message is intended only for the use of the recipient(s) named above and may contain confidential and/or privileged information. If you are not the intended recipient you have received this e-mail message in error and any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify us immediately and delete the original message

On 4/26/18, 1:30 PM, "Antonakakis, Manos" <manos@gatech.edu> wrote:

>Sure John, you can call me on the top of the hour.

>Happy to help you out in any way I can. However, is DARPA aware that GT >will need a 56% overhead on this, that is in order for you to get these >\$3M, I will need to come up with an add-on for HACCS and a budget that is >in the order of ~\$5.7M (just for this add-on)? > >Are they OK with this? > >< >Manos Antonakakis | manos@gatech.edu >Georgia Institute of Technology >FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 > > >___ >From: Hall, John <John.Hall@team.neustar> >Sent: Thursday, April 26, 2018 1:25:40 PM >To: Antonakakis, Manos >Cc: Joffe, Rodney >Subject: Ip Intelligence for HACCS > >Hello Manos, >We were recently in with the HACCS Team in Arlington. We discussed a >number of things, including strategies for procuring Neustar IP >Intelligence for the program. Since we already have a contractual >relationship with GTRC, we think that it would be ideal to work with your >organization to fulfill this requirement. At a high level, we¹re >proposing an unlimited 1 year license @ an annual subscription cost of >\$3M. Let me know when you have a few minutes to discuss or if you¹d like >to delegate to your contracts team. > >Thanks in advance > > > >John W Hall >Neustar, Inc. / Sr. Director - Federal Business >[T] (571) 246-2407 [E] john.hall@neustar.biz >____ >_____ > >The information contained in this e-mail message is intended only for the >use of the recipient(s) named above and may contain

>confidential and/or privileged information. If you are not the intended

>recipient you have received this e-mail message in error

>and any review, dissemination, distribution, or copying of this message

>is strictly prohibited. If you have received this

>communication in error, please notify us immediately and delete the

>original message

> >

>

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, October 3, 2018 3:05:25 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; ryan.schilcher@us.af.mil CC: tejas@kududyn.com; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; jim.simpson@cynnovative.com; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: [Non-DoD Source] Re:

Works for me and my team, Chris.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Schneck, Christopher (contr-i2o) < christopher.schneck.ctr@darpa.mil> Sent: Wednesday, October 3, 2018 10:04:00 AM To: ryan.schilcher@us.af.mil Cc: tejas@kududyn.com; Kline, Allison (contr-i2o); jim.simpson@cynnovative.com; Antonakakis, Manos; Keromytis, Angelos Subject: RE: [Non-DoD Source] Re:

Ryan,

No worries, sorry about not sending you that earlier. The week of 12 Nov looks good to me.

Jim, Tejas, Manos- How does the week of 12 Nov look for a trip down to Atl to do a deep dive into the analytics and datasets with AFOSI?

V/r,

Chris Schneck DARPA I2O SETA 571-524-3821 (cell) 918-6691

-----Original Message-----From: SCHILCHER, RYAN D SA USAF AFOSI AFOSI/3 FIS/CI&O <ryan.schilcher@us.af.mil> Sent: Wednesday, October 3, 2018 9:44 AM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Cc: Tejas Patel <tejas@kududyn.com>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Jim Simpson - Cynnovative <jim.simpson@cynnovative.com> Subject: RE: [Non-DoD Source] Re:

Hey Chris,

Unfortunately I cannot make it out this week but have full faith the venerable Mr. Stambaugh can back-brief me on anything of note.

My calendar is a little whacko the next few weeks but the first two weeks of November are pretty open at the moment so those would be best for us. If that's no good I can try to make something work sooner.

-Ryan

-----Original Message-----From: Schneck, Christopher (contr-i2o) [mailto:christopher.schneck.ctr@darpa.mil] Sent: Tuesday, October 2, 2018 9:34 AM To: SCHILCHER, RYAN D SA USAF AFOSI AFOSI/3 FIS/CI&O <ryan.schilcher@us.af.mil> Cc: Tejas Patel <tejas@kududyn.com>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Jim Simpson - Cynnovative <jim.simpson@cynnovative.com> Subject: Re: [Non-DoD Source] Re:

Ryan,

Thanks for the email. That all sounds great, we have a lot of new findings to share and would love to hear what you see. I will sync everyone's calendars and figure out a good time to host the LAN party. What does your calendar look like end of oct, early nov? In addition, I know it's last minute but we do have a site visit at Ga Tech this Friday and are presenting to USCC on 09 Oct at DARPA. Jason Stambaugh is attending the site visit, you are more than welcome to attend as well.

V/r,

Chris

> On Oct 2, 2018, at 10:05 AM, SCHILCHER, RYAN D SA USAF AFOSI AFOSI/3

> FIS/CI&O <ryan.schilcher@us.af.mil> wrote:

> > Hey Tejas!

>

> So sorry for the massive, massive delay. I had this starred to respond then

> got lost in my madness. Been out of the office for the majority of the past

> two months but back now! For at least a bit. I want to continue our

> discussions on these matters, especially with the change of activity on the

> whole after the indictments. Would love to talk about the changes you all

> have observed as compared to what we are seeing. If we can establish some

> secure comms that would be great. We can try the DoD PKI certs or use PGP on

> an alternate email for me () if you want to go that

> route. Obviously telephones work as well.

>

I would like to re-engage with a good time now to see if possible for us to
 have a "LAN Party" as I called it at our meeting and see if we can work on a

> dataset together over a few days, probably in Atlanta? We can start putting

> together some queries and whatnot as discussed and go from there.

>

> -Ryan

>

> -----Original Message-----

> From: Tejas Patel [mailto:tejas@kududyn.com]

> Sent: Wednesday, August 22, 2018 3:27 PM

> To: Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; SCHILCHER,

> RYAN D SA USAF AFOSI AFOSI/3 FIS/CI&O <ryan.schilcher@us.af.mil>; Jim

- > Simpson Cynnovative <jim.simpson@cynnovative.com>
- > Cc: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>
- > Subject: [Non-DoD Source] Re:

>

- > Ryan:
- >
- > Replying with a signed email so you have my certs.
- >

> Do you have information on any of the recent happenings in the news? I can> elaborate more on this with encrypted email or over the phone.

- >
- > Regards,
- > Tejas
- >
- > On 8/22/18, 3:21 PM, "Kline, Allison (contr-i2o)"
- > <allison.kline.ctr@darpa.mil> wrote:
- >
- > Ryan,
- >
- > Thank you for hosting us last week. Now that we're settled back in the DMV
- > I wanted to connect you with Tejas and Jim so that we can continue to talk,
- > especially regarding any questions about the data your team may have, and
- > how we would want to shape ingest moving forward.
- >
- > Regards,
- >
- > Allison Kline
- > DARPA I2O SETA
- > 571-218-4476 (Desk)
- > 571-471-5586 (Cell)
- > allison.kline.ctr@darpa.mil
- >
- >
- >

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, October 3, 2018 7:51:24 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Keromytis, Angelos

<angelos.keromytis@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; tejas@kududyn.com Subject: Re: [Non-DoD Source] Re:

10-4

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: <antonakakis@gmail.com> on behalf of Manos Antonakakis<manos@gatech.edu> Sent on: Wednesday, August 10, 2016 11:56:13 AM

To: Roberts, Kristen N<kp138@gatech.edu>; Joffe, Rodney<Rodney.Joffe@neustar.biz> Subject: DARPA - EA Sub: Neustar

Hey Kristen,

Please meet Rodney. Rodney, Kristen is my great financial admin.

Kristen, Rodney can help you with all necessary details you might need for OSP.

For Neustar, will have the following yearly breakdown:

Y1: \$1M Y2: \$300K

Y3: \$250K

Y4: \$250K Y5: \$125K

1 J. Ø123K

The SOW have been structured in such away that will reflect this distribution of funds. One special thing with Neustar is the following. It would be ideal if we can have a PO from them by 30th of September. This is something that we should try very hard to do.

Rodney, please help Kristen with any information she might need from Neustar in order to have you formally in the GT systems as a vendor.

Cheers,

From:on behalf of Manos Antonakakis<manos@gatech.edu>Sent on: Wednesday, August 10, 2016 11:56:13 AMTo:Roberts, Kristen N<kp138@gatech.edu>; Joffe, Rodney<Rodney.Joffe@neustar.biz>Subject: DARPA - EA Sub: Neustar

Hey Kristen,

Please meet Rodney. Rodney, Kristen is my great financial admin.

Kristen, Rodney can help you with all necessary details you might need for OSP.

For Neustar, will have the following yearly breakdown:

Y1: \$1M

Y2: \$300K Y3: \$250K

Y4: \$250K

Y5: \$125K

The SOW have been structured in such away that will reflect this distribution of funds. One special thing with Neustar is the following. It would be ideal if we can have a PO from them by 30th of September. This is something that we should try very hard to do.

Rodney, please help Kristen with any information she might need from Neustar in order to have you formally in the GT systems as a vendor.

Cheers,

> on behalf of Manos Antonakakis<manos@gatech.edu>

Sent on: Friday, July 29, 2016 2:00:14 PM

To: David Dagon</br/>dagon@sudo.sh>

CC: Ahamad, Mustaque<mustaq@cc.gatech.edu>; Farrell, Michael D<Michael.Farrell@gtri.gatech.edu>; Blough, Douglas M<doug.blough@ece.gatech.edu>; Fabian Monrose<fabian@cs.unc.edu>; Beyah, Raheem A<rbeyah@coe.gatech.edu>; Roberto Perdisci<perdisci@cs.uga.edu>; Dan Durrer<dan@durrer.net>; Rodney Joffe<rjoffe@centergate.com>; Simon Forster<forster@spamteq.com>; Tim Chen<tim@domaintools.com>

Subject: DARPA-16-34-EA-FP-023 --- Status Update

Gentlemen,

From:

This is a status update on where we are and where we are heading to.

In the last two weeks I have been in contact with a contracting person (Danielle) from USAF. They wanted a number of clarifications about our project so the contract negotiation can begin. Last night we finalized their last clarification request around our statement of work, and this morning just got of the phone with them, where they acknowledged we are good to go.

Next step here is to quickly negotiate the contract and begin the project. My number one priority at this point is for this to happen asap. I am canceling all my trips in August so I can work with them day-to-day. The program has a start date the first of November, however, I want to have us begin as early as end of August (or sooner if possible).

The two things I am making sure are:

1. We can get a written permission of a start date August 15. This will enable the academic arm of this project to start billing against the project throughout the entire Fall semester. Vis-a-vis, your students will be covered by the project in Fall.

2. The subs to get paid asap, before we even start pulling data from your networks. This is a fight that I am winning at the moment with Georgia Tech. Apparently, if you bring (this level of) funds in the school, people read your email. :) As soon as I have additional news around this, I will relay them to you. In the mean time, I will be reaching out independently so we can have a standard NDA in place between GT and your organizations. Please, be ready to share with me your standard NDA.

All-in-all, things are on track (actually, slightly ahead of schedule), and we should be starting soon. If you have any questions or issues, please drop me and Dave a note. We are here to help smooth this process and have a great 4.5 years of collaboration.

Thanks,

From: Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, Manos **Sent on:** Friday, February 22, 2019 1:02:56 PM

To: Rodney Joffe<rjoffe@centergate.com>; Joffe, Rodney<Rodney.Joffe@team.neustar>

CC: Ian Crone<ian.crone@darpa.mil>; Schneck, Christopher (contri2o)<christopher.schneck.ctr@darpa.mil>

Subject: E-introductions: Neustar --- new EA PM

Hey Rodney,

I am very happy to announce that we now have a new Program Manager (PM) for the EA project. Mr. Ian Crone will be leading the program from this point on, and Mr. Chris Schneck will be helping him out.

All of us think that it would be great if the new PM team meets (in a virtual or physical meeting) with you and talk about the datasets you have been providing in support of my effort in this project. I do not _have to_ be part of this meeting, because my schedule is too busy and I will simply slow things down. You should work directly with the Chris and Ian and set the meeting up.

Many thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, Manos
Sent on: Friday, February 15, 2019 1:22:11 PM
To: Keromytis, Angelos D<angelos@gatech.edu>
Subject: Fw: Neustar Executive Visit to PI meeting March 8th

fyi-

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Sent: Friday, February 15, 2019 8:05 AM To: Antonakakis, Manos; rodney.joffe@team.neustar Cc: Crone, Ian Subject: RE: Neustar Executive Visit to PI meeting March 8th

Rodney,

Unfortunately, site visits are reserved for the DARPA team and the performer only. Site visits are an opportunity for the PM to critique (if necessary) the performer's work and it is not appropriate for vendors/subcontractors to attend these visits. In addition, a lot of times sensitive information from case studies, that our transition partners have provided, are presented and discussed.

The PM, Ian Crone, needs to have a separate discussion with Manos and the GT team, but he would like to meet with your organization and is happy to have a sidebar meeting with them in Atlanta if you want to go down there (to meet with Manos separately) or to meet with you locally here in DC.

V/r,

Chris Schneck DARPA I2O SETA 571-218-4429 (office) <u>571-524-</u>3821 (cell)

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Monday, February 11, 2019 11:10 PM To: Rodney Joffe <rodney.joffe@team.neustar>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: Neustar Executive Visit to PI meeting March 8th

Thanks you Rodney for the email.

For you guys to attend the site visit I will need to get the green light from Chris. Chris, can you please check and let us know if you have any issues with this?

Thanks, Manos

Typos due to mobile device ...

> On Feb 11, 2019, at 21:06, Rodney Joffe <rodney.joffe@team.neustar> wrote:

>

> Hello Manos,

>

From: Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, Manos
Sent on: Saturday, January 25, 2020 1:44:20 PM
To: Schneck, Christopher (contr-i2o)<christopher.schneck.ctr@darpa.mil>
Subject: Fw: Quick catch up with Neustar

FYI-

Manos Antonakakis | Associate Professor | manos@gatech.edu School of Electrical and Computer Engineering Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Friday, January 24, 2020 3:35 PM To: Christopher Schneck; Rodney Joffe Cc: Ian Crone Subject: Quick catch up with Neustar

Hey Chris,

As I explained in the DHS-related email I got the green light to use the NSR and PF data from Vic and Rodney. Rodney was asking about the long term plan for the Neustar data as far as the government is concerned. While I can answer this question form the lenses of GT and my private ventures I cannot answer this on behalf of the USG.

Perhaps, you (I know Ian is busy) can you get on call with Rodney and explain to him what the long term plan is?

Thanks!

Microsoft Exchange Server; converted from html;

From: Roberts, Kristen N<fvirgil6@gatech.edu> on behalf of Roberts, Kristen N

Sent on: Wednesday, August 10, 2016 12:27:42 PM

To: Antonakakis, Manos<manos@gatech.edu>; Joffe, Rodney<Rodney.Joffe@neustar.biz> Subject: Re: DARPA - EA Sub: Neustar From: Rodney Joffe<rodney.joffe@neustar.biz>

Sent on: Thursday, August 11, 2016 10:36:16 PM

To: Roberts, Kristen N<kp138@gatech.edu>

CC: Antonakakis, Manos<manos@gatech.edu>

Subject: Re: DARPA - EA Sub: Neustar

Hello Kristen,

I'm glad to meet with you and looking forward to getting the paperwork handled. And I'm also glad that Manos allowed us to be part of the project. Let me know when you're ready :-)

> On Aug 10, 2016, at 8:27 AM, Roberts, Kristen N <kristen.roberts@ece.gatech.edu> wrote:

>

>Hi Manos,

>

> Thank you for the kind introduction.

>

> Rodney, it is a pleasure to meet you and congratulations on this grand award! I am working with our contracting specialist to confirm which forms are needed to have Neustar set-up efficiently for the start of this project. I will do my best to have the subaward paperwork and PO entered by 9/30, but please note this timeline is dependent upon execution of the main project from DARPA in OSP.

>

> I look forward to working with you on this project. Please let me know if you need any additional information.

- >
- > Best,
- > Kristen
- >
- >
- >
- > Kristen Roberts
- > Financial Administrator III
- > Georgia Institute of Technology
- > School of Electrical & Computer Engineering
- > 266 Ferst Drive, Atlanta, GA 30332-0250
- > KACB-Rm 3352
- > Ph: 404.385.6485
- > Email: Kristen.roberts@ece.gatech.edu
- >
- >
- >
- > From:
- > From:
- > Sent: Wednesday, August 10, 2016 7:56 AM
- > To: Roberts, Kristen N; Joffe, Rodney
- > Subject: DARPA EA Sub: Neustar
- >
- > Hey Kristen,
- >
- > Please meet Rodney. Rodney, Kristen is my great financial admin.
- >

>

- > Kristen, Rodney can help you with all necessary details you might need for OSP.
- > For Neustar, will have the following yearly breakdown:
- >Y1:\$1M
- > Y2: \$300K
- > Y3: \$250K
- > Y4: \$250K
- > Y5: \$125K
- >
- > The SOW have been structured in such away that will reflect this

on behalf of Manos Antonakakis <manos@gatech.edu>

Microsoft Exchange Server; converted from html;

From: Roberts, Kristen N<fvirgil6@gatech.edu> on behalf of Roberts, Kristen N

- Sent on: Tuesday, September 6, 2016 2:46:31 PM
- To: Rodney Joffe<rodney.joffe@neustar.biz>
- CC: Antonakakis, Manos<manos@gatech.edu>
- Subject: Re: DARPA EA Sub: Neustar

From:

on behalf of Manos Antonakakis<manos@gatech.edu>

Sent on: Thursday, August 25, 2016 12:34:05 PM

To: David Dagon<dagon@sudo.sh>

CC: Ahamad, Mustaque<mustaq@cc.gatech.edu>; Farrell, Michael D<Michael.Farrell@gtri.gatech.edu>; Blough, Douglas M<doug.blough@ece.gatech.edu>; Fabian Monrose<fabian@cs.unc.edu>; Beyah, Raheem A<rbeyah@coe.gatech.edu>; Roberto Perdisci<perdisci@cs.uga.edu>; Dan Durrer<dan@durrer.net>; Rodney Joffe<rjoffe@centergate.com>; Simon Forster<forster@spamteq.com>; Tim Chen<tim@domaintools.com>

Subject: Re: DARPA-16-34-EA-FP-023 --- Status Update

Folks,

The Air Force people just came back to me, with the following message.

So great to hear from you!

The new start contract package has been assigned to a contract specialist and contracting officer. The contract specialist will reach out to George Tech, but I'm not certain when exactly this will be.

Contract awards are anticipated for early November.

Thanks again for your email.

Danielle

They are moving _very slow_ folks, regardless the emails I am sending their way. Not sure what else I can do but wait.

Cheers,

Manos

On Wed, Aug 10, 2016 at 11:16 AM, Manos Antonakakis <manos@gatech.edu> wrote: > Folks,

- >
- > This is a quick update.

- > We are trying to have the subs ready, even before we begin the
- > negotiation of the contract begins. This should expedite the official
- > start of this project. Meanwhile, Dave and I have taken care two
- > requests for attribution reports that came towards our team. We didn't
- > wanted to ruin your summer, so with the exception of Rodney and Tim
- > (who helped us with data --- many thanks), we delivered against these
- > requests ourselves.
- >
- > The quality of our deliverables trilled the DARPA folks. In private
- > channels they acknowledged that; "the work we delivered [through our
- > framework] is well ahead of what is the norm [in research]". Clearly,
- > the first impression of what we can deliver is well above the bar.
- > > With respect of the Air Force folks, I am waiting for someone to
- > contact me so I can initialize the contract negotiation. I do not have
- > a date for when this will happen. Expect news as I receive them.

> As always, if you need anything please ring me up. > > Cheers, >> Manos > > On Tue, Aug 2, 2016 at 11:33 AM, Manos Antonakakis <manos@gatech.edu> wrote: >> Folks. >> >> A quick update from DARPA. Just talked to them over the phone. The >> funds are flowing into our accounts and in the next two weeks or so >> the contract negotiation shall begin. >> >> Also, they are investigating our request to have as the start date the >> 15th of August. If I have any news around this I will let you know. >> >> Cheers, >> >> Manos >> >> >> >> On Fri, Jul 29, 2016 at 10:00 AM, Manos Antonakakis <manos@gatech.edu> wrote: >>> Gentlemen, >>> >>> This is a status update on where we are and where we are heading to. >>> >>> In the last two weeks I have been in contact with a contracting person >>> (Danielle) from USAF. They wanted a number of clarifications about our >>> project so the contract negotiation can begin. Last night we finalized >>> their last clarification request around our statement of work, and >>> this morning just got of the phone with them, where they acknowledged >>> we are good to go. >>> >>> Next step here is to quickly negotiate the contract and begin the >>> project. My number one priority at this point is for this to happen >>> asap. I am canceling all my trips in August so I can work with them >>> day-to-day. The program has a start date the first of November, >>> however, I want to have us begin as early as end of August (or sooner >>> if possible). >>> >>> The two things I am making sure are: >>> >>> 1. We can get a written permission of a start date August 15. This >>> will enable the academic arm of this project to start billing against >>> the project throughout the entire Fall semester. Vis-a-vis, your >>> students will be covered by the project in Fall. >>> >>> 2. The subs to get paid asap, before we even start pulling data from >>> your networks. This is a fight that I am winning at the moment with >>> Georgia Tech. Apparently, if you bring (this level of) funds in the >>> school, people read your email. :) As soon as I have additional news >>> around this, I will relay them to you. In the mean time, I will be >>> reaching out independently so we can have a standard NDA in place >>> between GT and your organizations. Please, be ready to share with me >>> your standard NDA. >>> >>> All-in-all, things are on track (actually, slightly ahead of >>> schedule), and we should be starting soon. If you have any questions >>> or issues, please drop me and Dave a note. We are here to help smooth

Sent: Tuesday, June 7, 2010 10:25:14 AIVI

MicAosofiaEaklsaEgenGenveil;KoRobertesl Kristerhtml;

frieffe, Reberts, Kristen N<kristen.roberts@ece.gatech.edu> on behalf of Roberts, Kristen N

Schrön: Tuesday, ejune P, 2016 2:27:37 PM

To: Hayman, Denise<Denise.Hayman@neustar.biz>; Antonakakis, Emmanouil K<manos@gatech.edu>

CC: Joffe, Rodney<Rodney.Joffe@neustar.biz>

Subject: Re: Letter re: Darpa bid

Hi Manos - I¹m traveling in the Uk - sorry for the delay

Here you go. Two formatsŠ I can¹t get the .pdf one too look right so sending you both so you have them

Denise Hayman Neustar, Inc. / VP Global Security Sales Office: 415.590.4618 / Mobile: 415.214.5088 denise.hayman@neustar.biz / <u>HYPERLINK "http://www.neustar.biz" www.neustar.biz</u> <applewebdata://BE8398A2-2BCB-4EC0-9CC7-195CDDBAABBD/www.neustar.biz> Twitter: @ <<u>HYPERLINK "https://twitter.com/lisajoyrosner" https://twitter.com/lisajoyrosner</u>>denisedeshayman/ LinkedIn: HYPERLINK "https://www.linkedin.com/in/denisehayman" https://www.linkedin.com/in/denisehayman

On 6/6/16, 7:35 PM,

on behalf of Manos Antonakakis" on behalf of manos@gatech.edu> wrote:

>Hey Denise,

>

- >We got a push back on the format of your quote. Can you please make
- >sure you quote is visible in a single page? Please send this to
- >Kristen directly, as we are running out of time.

- >Also, please make sure that the quote date is valid until the "start
- >date" of our project (hopefully we get awarded). That date is,
- >11/30/2016.
- >
- >Many thanks,
- >
- >Manos
- >
- >On Thu, Jun 2, 2016 at 12:27 PM, Hayman, Denise
- ><Denise.Hayman@neustar.biz> wrote:
- >> Hi Manos please find the attached letter in regards to our
- >>Darpa/Neustar
- >> bid
- >>
- >>
- >>
- >>
- >> Denise Hayman
- >>
- >> Neustar, Inc. / VP Global Security Sales

From:Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, ManosSent on:Friday, September 7, 2018 2:52:58 AMTo:Rodney Joffe<rjoffe@centergate.com>

Subject: Re: Touch base

I was not planing to, because that is the only hard facts I have.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Rodney Joffe <rjoffe@centergate.com> Sent: Thursday, September 6, 2018 10:50:48 PM To: Antonakakis, Manos Subject: Re: Touch base

DONT TELL HIM ANYTHING DIFFERENT TO ANGELOS After Oct 1 new fiscal year.

> On Sep 6, 2018, at 10:35 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Venkat, nothing official at the moment. We are in waiting mode. If you want some unofficial news, you can give me a quick call.

- >
- > Thanks,
- >
- >___
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- >

- > To: Antonakakis, Manos
- > Cc: Joffe, Rodney
- > Subject: Touch base
- >
- > Manos,
- >
- > Do you have any other information from DARPA program managers chasing possible path for this fiscal funding ?
- > Thank you.
- >
- > Venkat.

> From: Achanta, Venkat < Venkat.Achanta@team.neustar>

> Sent: Thursday, September 6, 2018 10:30:34 PM

From: Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, Manos

Sent on: Friday, September 7, 2018 2:35:31 AM

To: Achanta, Venkat<Venkat.Achanta@team.neustar>

CC: Joffe, Rodney<Rodney.Joffe@team.neustar>

Subject: Re: Touch base

Venkat, nothing official at the moment. We are in waiting mode. If you want some unofficial news, you can give me a quick call.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Achanta, Venkat <Venkat.Achanta@team.neustar> Sent: Thursday, September 6, 2018 10:30:34 PM To: Antonakakis, Manos Cc: Joffe, Rodney Subject: Touch base

Manos,

Do you have any other information from DARPA program managers chasing possible path for this fiscal funding ?

Thank you.

Venkat.

>> DONT TELL HIM ANYTHING DIFFERENT TO ANGELOS After Oct 1 new fiscal year. >> >>> On Sep 6, 2018, at 10:35 PM, Antonakakis, Manos <manos@gatech.edu> wrote: >>> >>> Venkat, nothing official at the moment. We are in waiting mode. If you want some unofficial news, you can give me a quick call. >>>> >>> Thanks, >>> >>> ____ >>> Manos Antonakakis | manos@gatech.edu >>> Georgia Institute of Technology >>> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 >>> >>> >>> >>> From: Achanta, Venkat <Venkat.Achanta@team.neustar> >>> Sent: Thursday, September 6, 2018 10:30:34 PM >>> To: Antonakakis, Manos >>> Cc: Joffe, Rodney >>> Subject: Touch base >>> >>> Manos, >>> >>> Do you have any other information from DARPA program managers chasing possible path for this fiscal funding ? >>> >>> Thank you. >>> >>> Venkat. >> >

From: Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, Manos
Sent on: Wednesday, April 25, 2018 1:49:21 PM
To: Rodney Joffe<rjoffe@centergate.com>
Subject: Re: You still up?

Subject. Re. 1 ou suit up.

Sorry, just saw the email. I am on a deadline for a few DARPA stuff.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Rodney Joffe <rjoffe@centergate.com> Sent: Tuesday, April 24, 2018 11:25:31 PM To: Antonakakis, Manos Subject: You still up? **From:** Antonakakis, Manos<manos@gatech.edu> on behalf of Antonakakis, Manos **Sent on:** Thursday, August 2, 2018 8:07:25 PM

To: Hook, Lisa<lisa.hook@team.neustar>; Joffe, Rodney<Rodney.Joffe@team.neustar>

CC: Keromytis, Angelos D CIV DARPA (US)<angelos.keromytis@darpa.mil>

Subject: Regarding HACCS

Hey Lisa,

I would like to reiterate that I take full responsibility for the HACCS delay. The ECP (contract modification) between GT and DARPA takes time we are in the process of finalize this modification. At the same time, I would like to have Angelos relay the status of everything we are doing (HACCS and EA) in person --- especially if Charlie is available for a meeting. My understanding is that Angelos would be more than happy to swing by your offices.

Many thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: Manos Antonakakis <manos@gatech.edu>

Sent on: Wednesday, August 29, 2018 10:20:02 PM

To: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Farrell, Michael <Michael.Farrell@gtri.gatech.edu> CC: Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Crone, Ian <ian.crone@darpa.mil>; Scott, Shivon <Shivon.Scott@gtri.gatech.edu> Subject: Re: Addendum to HACCS

Folks, do we have any updates on this one? The impact of delaying this even further will be significant for both EA and HACCS projects --- something I really would like to avoid.

The data provider that was so unbelievably supportive of our (mainly EA but also HACCS) efforts to day is less than happy (to say the least).

Many thanks,

Manos

On Fri, 2018-08-24 at 23:20 +0000, Keromytis, Angelos wrote:
> Thanks. Tom will follow up with Abby to see what happened.
>
> On Aug 24, 2018, at 16:50, Farrell, Michael <michael.farrell@gtri.gat< td=""></michael.farrell@gtri.gat<>
> ech.edu< <u>mailto:Michael.Farrell@gtri.gatech.edu</u> >> wrote:
>
> Hello,
>
> Below please see the email transmittal that GT contracting (Dan) sent
> to DARPA (Abby) at 700am on August 9.It would appear DARPA
> contracting has had the REA for Haccs for more than two weeks.
>
> Although I don't have the attachment that was sent at that time, I
> would assume that if there were questions on the proposal then Abby
> would've replied back to Dan.
>
> Please advise if somehow the email below on August 9 did not, in
> fact, end up at DARPA.Or if there was a reply back from CMO that
> Dan might have inadvertently missed. If further info is needed or
> changes, then please have CMO contact Dan in GT OSP.
>
> Thanks.
>
> —MF
>
>
>
>
> From: Sibble, Dan
> Sent: Thursday, August 9, 2018 7:07 AM
> To: 'Jordan, Abigail' <abigail.jordan@darpa.mil<mailto:abigail.jordan< td=""></abigail.jordan@darpa.mil<mailto:abigail.jordan<>
> @darpa.mil>>
> Subject: RE: Addendum to HACCS
>
>

> Good Morning Abby,

- >
- >
- > Enclosed please find GTRI's REA proposal.Contact me at your
- > convenience with any questions or should additional information be
- > needed.
- >
- >
- >
- > Best,
- >
- >
- >
- > Dan
- >
- > Dan Sibble
- > Contracting Officer
- > Georgia Institute
- > of Technology
- > Office of Sponsored Programs
- > Research Administration Bldg
- > 505 Tenth St NWAtlanta, GA 30332-0420
- > Ph: (404)894-6947 Fax: (404) 894-6956
- > Email:hxxxp://xxx.osp.gatech.edu/
- >
- >
- >
- >
- >
- >
- > -----Original Message-----
- > From: Jordan, Abigail [mailto:abigail.jordan@darpa.mil]
- > Sent: Monday, August 6, 2018 8:25 AM
- > To: Sibble, Dan <Dan.Sibble@osp.gatech.edu<mailto:Dan.Sibble@osp.gate
- > ch.edu>>
- > Subject: RE: Addendum to HACCS
- >
- >
- >
- > Hi Dan,
- >
- >
- >
- > Below is the message I received from Tom:
- >
- >
- >
- > "We have a HACCS site visit at GT on Monday and this will be a topic> of review.
- >
- >
- >
- > For purposes of replying to Dan, will defer to you on guidance of
- > what should be included in the REA proposal. He is also looking for
- > confirmation from CMO that the revised SoW does allow them to begin
- > working with the new subcontractors. Can you provide that? As for
- > funding, HACCS won't have access to FY19 budget until November (at
- > the earliest) and guidance to performers is to make current funding

```
> last through January 2019."
>
>
>
> As far as the REA proposal we will need a simple cost spreadsheet
> illustrating the changes and cost, a BOM if there is a material
> increase and a cover letter explain the change.
>
>
>
> Does this help?
>
>
>
> Thank you,
>
> Abby
>
>
>
>
>
>
>
> -----Original Message-----
>
> From: Sibble, Dan <Dan.Sibble@osp.gatech.edu<mailto:Dan.Sibble@osp.ga
> tech.edu>>
>
> Sent: Friday, August 3, 2018 3:29 PM
>
> To: Jordan, Abigail <abigail.jordan@darpa.mil<mailto:abigail.jordan@d
> arpa.mil>>
>
> Subject: RE: Addendum to HACCS
>
> Importance: High
>
>
>
> Hi Abby,
>
>
>
>
>
>
>
> Following up on my previous message, I don't think I saw a response
> on this.
>
>
>
>
>
>
```

>	
>	To: 'abigail.jordan@darpa.mil <mailto:abigail.jordan@darpa.mil>' <abig< td=""></abig<></mailto:abigail.jordan@darpa.mil>
	ail.jordan@darpa.mil <mailto:abigail.jordan@darpa.mil>></mailto:abigail.jordan@darpa.mil>
>	
	Subject: FW: Addendum to HACCS
	Subject. FW. Addendum to HACCS
>	
>	
>	
>	
>	
>	
>	
>	Hi Abby,
>	
>	
>	
>	
>	
>	
>	
	I was recently on vacation and I am now playing catch up this
	week.I was forwarded the message below regarding the HACCS addendum
>	now that P00003 has been executed.
>	
>	
>	
>	
>	
>	
>	
	Can you:
>	
>	
>	
	1. Confirm the accuracy of the guidance in Mr. Maddern's message
>	below
>	
>	
>	
>	
>	
>	
>	
	2.Advise what all is needed for the REA proposal
>	
>	
>	
>	
>	
>	
>	
>	3.Provide guidance on the future funding outlays
>	
>	
>	
>	
>	

```
>
>
>
>
>
>
>
>
>
>
>
>
>
  -----Original Message-----
>
>
>
>
> From: Maddern, Thomas (contr-i2o) < Thomas.Maddern.ctr@darpa.mil
> <mailto:Thomas.Maddern.ctr@darpa.mil<mailto:Thomas.Maddern.ctr@darpa.
> mil%20%3cmailto:Thomas.Maddern.ctr@darpa.mil>> >
>
>
>
> Sent: Wednesday, July 18, 2018 10:58 AM
>
>
>
> To: Mitchell, Michael F <michael.mitchell@ece.gatech.edu <mailto:mich
> ael.mitchell@ece.gatech.edu<mailto:michael.mitchell@ece.gatech.edu%20
> %3cmailto:michael.mitchell@ece.gatech.edu>> >
>
>
>
> Cc: Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil <mailto:a
> llison.kline.ctr@darpa.mil<mailto:allison.kline.ctr@darpa.mil%20%3cma
> ilto:allison.kline.ctr@darpa.mil>> >; Antonakakis, Manos <manos@gatec
> h.edu <mailto:manos@gatech.edu<mailto:manos@gatech.edu%20%3cmailto:ma
> nos@gatech.edu>> >
>
>
>
> Subject: Re: Addendum to HACCS
>
>
>
>
>
>
>
> Michael,
>
>
>
>
>
>
>
```

> Contract mod revising the SoW was sent to Dan Sibble this morning

> Contract mod revising the Sow was sent to Dan Sibble this morning.
> Process going forward is:
>
>
>
>
>
>
>
> - GTARC submits an REA proposal to CMO for an increase in contract
> ceiling
> cening
>
>
>
> - DARPA reviews the REA and CMO negotiates the revised costs
-
>
>
>
> - Contract mod issued increasing contract ceiling and provides
> incremental funding
>
>
>
>
>
>
>
> As previously discussed, funds will not be available until
 > As previously discussed, funds will not be available until > November/December at the earliest. The funds currently on contract.
> November/December at the earliest. The funds currently on contract
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019.
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019.
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019.
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. >
> November/December at the earliest. The funds currently on contract > need to keep GT going through January. GT should clarify with CMO if > the new subcontractors can begin work now or if the above process > need to be completed first. If the former, GT needs to decide whether > the current funding can support the existing work and new > subcontractor costs into 2019. >
> November/December at the earliest. The funds currently on contract > need to keep GT going through January. GT should clarify with CMO if > the new subcontractors can begin work now or if the above process > need to be completed first. If the former, GT needs to decide whether > the current funding can support the existing work and new > subcontractor costs into 2019. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > > > Please let me know if you have any questions. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > > > Please let me know if you have any questions. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > > > Please let me know if you have any questions. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > > > Please let me know if you have any questions. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > > > Please let me know if you have any questions. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > > Please let me know if you have any questions. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. > > > Please let me know if you have any questions. > >
 November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019. Please let me know if you have any questions. Please let me know if you have any questions. Tom

- >
- > >
- >

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Saturday, August 25, 2018 12:20:36 AM To: Farrell, Michael <Michael.Farrell@gtri.gatech.edu> CC: Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Crone, Ian <ian.crone@darpa.mil>; Antonakakis, Emmanouil K <manos@gatech.edu>; Scott, Shivon <Shivon.Scott@gtri.gatech.edu> Subject: Re: Addendum to HACCS

Thanks. Tom will follow up with Abby to see what happened.

On Aug 24, 2018, at 16:50, Farrell, Michael < Michael.Farrell@gtri.gatech.edu < mailto:Michael.Farrell@gtri.gatech.edu > > wrote:

Hello,

Below please see the email transmittal that GT contracting (Dan) sent to DARPA (Abby) at 700am on August 9. It would appear DARPA contracting has had the REA for Haccs for more than two weeks.

Although I don't have the attachment that was sent at that time, I would assume that if there were questions on the proposal then Abby would've replied back to Dan.

Please advise if somehow the email below on August 9 did not, in fact, end up at DARPA. Or if there was a reply back from CMO that Dan might have inadvertently missed. If further info is needed or changes, then please have CMO contact Dan in GT OSP.

Thanks.

—MF

From: Sibble, Dan Sent: Thursday, August 9, 2018 7:07 AM To: 'Jordan, Abigail' <abigail.jordan@darpa.mil<mailto:abigail.jordan@darpa.mil>> Subject: RE: Addendum to HACCS

Good Morning Abby,

Enclosed please find GTRI's REA proposal. Contact me at your convenience with any questions or should additional information be needed.

Best,

Dan

Dan Sibble Contracting Officer Georgia Institute of Technology Office of Sponsored Programs Research Administration Bldg 505 Tenth St NW Atlanta, GA 30332-0420 Ph: (404)894-6947 Fax: (404) 894-6956 Email: hxxxp://xxx.osp.gatech.edu/

-----Original Message-----From: Jordan, Abigail [<u>mailto:abigail.jordan@darpa.mil</u>] Sent: Monday, August 6, 2018 8:25 AM To: Sibble, Dan <Dan.Sibble@osp.gatech.edu<mailto:Dan.Sibble@osp.gatech.edu>> Subject: RE: Addendum to HACCS

Hi Dan,

Below is the message I received from Tom:

"We have a HACCS site visit at GT on Monday and this will be a topic of review.

For purposes of replying to Dan, will defer to you on guidance of what should be included in the REA proposal. He is also looking for confirmation from CMO that the revised SoW does allow them to begin working with the new subcontractors. Can you provide that? As for funding, HACCS won't have access to FY19 budget until November (at the earliest) and guidance to performers is to make current funding last through January 2019."

As far as the REA proposal we will need a simple cost spreadsheet illustrating the changes and cost, a BOM if there is a material increase and a cover letter explain the change.

Does this help?

Thank you,

Abby

-----Original Message-----

From: Sibble, Dan <Dan.Sibble@osp.gatech.edu<mailto:Dan.Sibble@osp.gatech.edu>>

Sent: Friday, August 3, 2018 3:29 PM

To: Jordan, Abigail <abigail.jordan@darpa.mil<mailto:abigail.jordan@darpa.mil>>

Subject: RE: Addendum to HACCS

Importance: High

Hi Abby,

Following up on my previous message, I don't think I saw a response on this.

Thanks!

Dan

Dan Sibble

Contracting Officer

Georgia Institute

of Technology

Office of Sponsored Programs

Research Administration Bldg

505 Tenth St NW Atlanta, GA 30332-0420

Ph: (404)894-6947 Fax: (404) 894-6956

Email: hxxxp://xxx.osp.gatech.edu/

From: Sibble, Dan

Sent: Thursday, July 26, 2018 3:37 PM

To: 'abigail.jordan@darpa.mil<mailto:abigail.jordan@darpa.mil>'<abigail.jordan@darpa.mil<mailto:abigail.jordan@darpa.mil>>

Subject: FW: Addendum to HACCS

Hi Abby,

I was recently on vacation and I am now playing catch up this week. I was forwarded the message below regarding the HACCS addendum now that P00003 has been executed.

Office of Sponsored Programs

Research Administration Bldg

505 Tenth St NW Atlanta, GA 30332-0420

Ph: (404)894-6947 Fax: (404) 894-6956

Email: hxxxp://xxx.osp.gatech.edu/

-----Original Message-----

From: Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil < mailto:Thomas.Maddern.ctr@darpa.mil<mailto:Thomas.Maddern.ctr@darpa.mil%20%3cmailto:Thomas.Maddern.ctr@darpa.r >> >

Sent: Wednesday, July 18, 2018 10:58 AM

To: Mitchell, Michael F <michael.mitchell@ece.gatech.edu < mailto:michael.mitchell@ece.gatech.edu<mailto:michael.mitchell@ece.gatech.edu%20%3cmailto:michael.mitchell@ece.gatec >> >

Cc: Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil < <u>mailto:allison.kline.ctr@darpa.mil<mailto:allison.kline.ctr@darpa.mil%20%3cmailto:allison.kline.ctr@darpa.mil</u>>> >; Antonakakis, Manos <manos@gatech.edu < <u>mailto:manos@gatech.edu<mailto:manos@gatech.edu%20%3cmailto:manos@gatech.edu</u>>> > Subject: Re: Addendum to HACCS

Michael,

Contract mod revising the SoW was sent to Dan Sibble this morning. Process going forward is:

- GTARC submits an REA proposal to CMO for an increase in contract ceiling

- DARPA reviews the REA and CMO negotiates the revised costs

- Contract mod issued increasing contract ceiling and provides incremental funding

As previously discussed, funds will not be available until November/December at the earliest. The funds currently on contract need to keep GT going through January. GT should clarify with CMO if the new subcontractors can begin work now or if the above process need to be completed first. If the former, GT needs to decide whether the current funding can support the existing work and new subcontractor costs into 2019.

Please let me know if you have any questions.

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, January 5, 2018 4:34:29 PM To: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Adjacency matrix and active DNS authorization

Will do that.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Sent: Friday, January 5, 2018 11:33:32 AM To: Antonakakis, Manos; Keromytis, Angelos Subject: RE: Adjacency matrix and active DNS authorization

Manos,

I think offering the ActiveDNS feeds makes sense. The slides are still marked Distribution C (if I remember correctly) so send them via AMRDEC or refer him to me and I can do so (makes your life easier).

Regards, Tejas

-----Original Message-----From: Antonakakis, Manos [<u>mailto:manos@gatech.edu</u>] Sent: Friday, January 5, 2018 11:32 AM To: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Adjacency matrix and active DNS authorization

OK Tejas that makes sense. Let me do the following then.

I will share with him the reduced slide deck, and tell him if he wants the full deck he will have to talk directly with you. This way, I have a reason to include you in the email and I am giving you an opportunity to have a deeper discussion about their needs and interests.

At the same time, I will offer him full access to the Active DNS data and the Kafka Stream.

Sounds like a plan?

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Sent: Friday, January 5, 2018 11:27:09 AM To: Antonakakis, Manos; Keromytis, Angelos Subject: RE: Adjacency matrix and active DNS authorization Manos:

That works for us. Most likely we will share the sharable slides you sent us but good to hear what he really wants. I didn't realize anyone from SPAWAR was in the audience.

Regards, Tejas

-----Original Message-----From: Antonakakis, Manos [<u>mailto:manos@gatech.edu</u>] Sent: Friday, January 5, 2018 11:03 AM To: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: Fw: Adjacency matrix and active DNS authorization

Gents, do I send Kris your way?

-Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: kris buchanan <krisbuch@spawar.navy.mil> Sent: Friday, January 5, 2018 10:31 AM To: Antonakakis, Manos Subject: Adjacency matrix and active DNS authorization

Hi Manos,

I attended the Darpa meeting 1 DEC and watched your talk on active DNS with Adjacency matrices. The presentation was very interesting and I was hoping to get a copy of the slides if you'd be able to share these.

Kris

V/r

Kristopher R. Buchanan CPT, SC, CYBER Ph.D, USN Electromagnetics Technology Branch San Diego, CA NIPR: Kristopher.r.buchanan2.mil@mail.mil<mailto:Kristopher.r.buchanan2.mil@mail.mil> Kris.buchanan@navy.mil<mailto:Kris.buchanan@navy.mil> SIPR: Krisbuch@spawar.navy.smil.mil<mailto:Krisbuch@spawar.navy.smil.mil> JWICS: Kristopher.r.buchanan.mil@army.ic.gov<mailto:Kristopher.r.buchanan.mil@army.ic.gov> Office: (619) 553-6128 Cell: (702) 287-6824

[https://ipmcdn.avast.com/images/icons/icon-envelope-tick-round-orange-animated-no-repeatv1.gif]<https://www.avast.com/sig-email?utm_medium=email&utm_source=link&utm_campaign=sigemail&utm_content=emailclient&utm_term=icon> Virus-free. www.avast.com<<u>https://www.avast.com/sig-</u> email?utm_medium=email&utm_source=link&utm_campaign=sig-email&utm_content=emailclient&utm_term=link> From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, January 5, 2018 4:37:07 PM To: kris buchanan <krisbuch@spawar.navy.mil>; Patel, Tejas H CTR (US) <tejas.patel.ctr@darpa.mil>; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: Re: Adjacency matrix and active DNS authorization

Hey Kris.

I have CCed Tejas and Angelos (the DARPA PM team) that can share the slide deck with you.

I will followup on a different email with my team, which will grant you access to the ActiveDNS datasets.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: kris buchanan <krisbuch@spawar.navy.mil> Sent: Friday, January 5, 2018 10:31 AM To: Antonakakis, Manos Subject: Adjacency matrix and active DNS authorization

Hi Manos,

I attended the Darpa meeting 1 DEC and watched your talk on active DNS with Adjacency matrices. The presentation was very interesting and I was hoping to get a copy of the slides if you'd be able to share these.

Kris

V/r

Kristopher R. Buchanan CPT, SC, CYBER Ph.D, USN Electromagnetics Technology Branch San Diego, CA NIPR: Kristopher.r.buchanan2.mil@mail.mil<mailto:Kristopher.r.buchanan2.mil@mail.mil> Kris.buchanan@navy.mil<mailto:Kris.buchanan@navy.mil> SIPR: Krisbuch@spawar.navy.smil.mil<mailto:Krisbuch@spawar.navy.smil.mil> JWICS: Kristopher.r.buchanan.mil@army.ic.gov<mailto:Kristopher.r.buchanan.mil@army.ic.gov> Office: (619) 553-6128 Cell: (702) 287-6824

[https://ipmcdn.avast.com/images/icons/icon-envelope-tick-round-orange-animated-no-repeatv1.gif]<https://www.avast.com/sig-email?utm_medium=email&utm_source=link&utm_campaign=sigemail&utm_content=emailclient&utm_term=icon> Virus-free. www.avast.com<<u>https://www.avast.com/sig-</u> email?utm_medium=email&utm_source=link&utm_campaign=sig-email&utm_content=emailclient&utm_term=link> From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, October 23, 2018 10:26:36 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> CC: schwab@isi.edu; manos@gatech.edu; Tejas Patel (tejas@kududyn.com) <tejas@kududyn.com>; jim.simpson (jim.simpson@cynnovative.com) <jim.simpson@cynnovative.com> Subject: Re: affidavit example

Merry Christmas! :)

Dr. Angelos D. Keromytis Program Manager DARPA / Information Innovation Office (I2O) 675 N Randolph Street Arlington, VA 22203

(T) 571-218-4290 (NSTS) 918-6691

(NIPR) angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil> (SIPR) angelos.keromytis@darpa.smil.mil<mailto:angelos.keromytis@darpa.smil.mil> (JWICS) angelos.keromytis@darpa.ic.gov<mailto:angelos.keromytis@darpa.ic.gov>

On Oct 23, 2018, at 5:15 PM, Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>> wrote:

Steve,

Attached is a template the FBI uses for generating affidavits. Enjoy!

V/r,

Chris Schneck DARPA I2O SETA 571-524-3821 (cell) 918-6691

-----Original Message-----From: Kealiher, Brandon (WF) (FBI) <bkealiher@fbi.gov<mailto:bkealiher@fbi.gov>> Sent: Tuesday, October 23, 2018 1:45 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>> Cc: Hughes, Nolan E. (WF) (FBI) <nhughes@fbi.gov<mailto:nhughes@fbi.gov>> Subject: affidavit example

Hey Chris,

Please find attached the sample I meant to send on high side.

We're looking forward to having a more in depth discussion about how the EA tool can feed plain language narrative like this at your conference.

Let me know your questions in the meantime.

Best regards, Brandon

 From:
 Keromytis, Angelos<angelos.keromytis@darpa.mil>

 Sent on:
 Thursday, June 28, 2018 12:39:00 PM

 To:
 Tejas Patel<tejas@kududyn.com>

 CC:
 Schneck, Christopher (contr-i2o)<christopher.schneck.ctr@darpa.mil>; Kline, Allison (contr-i2o)<allison.kline.ctr@darpa.mil>; Jim Simpson

 Signed by:
 KEROMYTIS.ANGELOS.D.1501999799 on Thursday, June 28, 2018 12:38:57 PM

 Subject:
 Re: AFOSI Meeting Time

 Attachments: Nameless.txt (2.55 KB)

No problem - I hadn't been expecting to have anything when the meeting as scheduled, so no harm. I agree with having something solid.

WRT technical questions, my suggestion would be to ask Kyle or his folks in CO - I suspect this would be the answer I'd get from today's meeting if I asked. On Jun 27, 2018, at 23:56, Tejas Patel <<u>tejas@kududyn.com</u>> wrote:

Angelos, Chris:

Jim and I just got off a long call with Manos regarding what we can provide you for your meeting tomorrow. The short answer is we are not in a position to provide you with results that can be thoroughly validated and vetted quickly and don't want to provide you presentation material that may be incorrect given that we are already a year behind in our relationship with AFOSI.

What Manos, Jim, and I are doing is setting up a common server for us to collaborate on. For the DNS portion of the data Manos has some suggestions on how we can pull out information that he can use to enrich in his cluster. Jim and I agree his recommendations are a better way forward. I believe this will prove to be a good tangible first step in integrating between the teams. It isn't ideal given the scheduled meeting tomorrow but we should be able to get you some things going forward that will merit a meeting with AFOSI.

We do have questions about how the data is collected that will affect how the analysis is done. A working session with their team would prove useful at this point. Can you bring this up during your meeting tomorrow?

Sorry we couldn't pull something presentable together before your meeting.

Regards, Tejas

Tejas Patel Principal investigator Kudu Dynamics +1 919-332-3191 (c)

tejas@kududyn.com

On Wed, Jun 27, 2018 at 10:13 AM, Tejas Patel <<u>tejas@kududyn.com</u>> wrote: Chris:

Sounds good. We'll make sure to send you an encrypted mail with whatever we can find

tonight (probably late). Regards, Tejas

Tejas Patel Principal investigator Kudu Dynamics +1 919-332-3191 (c)

tejas@kududyn.com

On Wed, Jun 27, 2018 at 6:03 AM, Schneck, Christopher (contr-i2o) < <u>christopher.schneck.ctr@darpa.mil</u>> wrote:

Meeting is at 10 On Jun 26, 2018, at 11:16 PM, Tejas Patel <<u>tejas@kududyn.com</u><mailto:<u>teja</u> <u>s@kududyn.com</u>>> wrote:

Chris, Allison:

What time do you need slides for the AFOSI meeting on Thursday? Jim and I planned on working on them Wednesday evening.

Regards, Tejad

Get Outlook for iOS<hxxxps://aka.ms/o0ukef>

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, November 2, 2017 4:26:46 PM To: Antonakakis, Manos <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, November 2, 2017 4:26:45 PM Subject: Re: also on case 2 Attachments: Nameless.txt (760 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, November 2, 2017 4:25:24 PM To: Antonakakis, Manos <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, November 2, 2017 4:25:23 PM Subject: Re: also on case 2 Attachments: Nameless.txt (616 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, November 2, 2017 4:30:45 PM To: Antonakakis, Manos <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, November 2, 2017 4:30:44 PM Subject: Re: also on case 2 Attachments: Nameless.txt (1.29 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, November 27, 2018 6:13:14 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Apple Watch

In DC, sorry Arxige.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Tuesday, November 27, 2018 12:50:03 PM To: Antonakakis, Manos Subject: Apple Watch

If you're still at GT, can you get my Apple Watch from Will and bring it with you? (If not, no big deal.) Thanks,

-Angelos

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, November 27, 2018 8:01:29 PM To: Antonakakis, Manos <manos@gatech.edu> Subject: Re: Apple Watch

No problem.

Dr. Angelos D. Keromytis Program Manager DARPA / Information Innovation Office (I2O) 675 N Randolph Street Arlington, VA 22203

(T) 571-218-4290 (NSTS) 918-6691

(NIPR) angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil> (SIPR) angelos.keromytis@darpa.smil.mil<mailto:angelos.keromytis@darpa.smil.mil> (JWICS) angelos.keromytis@darpa.ic.gov<mailto:angelos.keromytis@darpa.ic.gov>

On Nov 27, 2018, at 1:13 PM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

In DC, sorry Arxige.

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>> Sent: Tuesday, November 27, 2018 12:50:03 PM To: Antonakakis, Manos Subject: Apple Watch

If you're still at GT, can you get my Apple Watch from Will and bring it with you? (If not, no big deal.) Thanks, -Angelos From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, April 25, 2018 12:20:07 AM To: Antonakakis, Manos <manos@gatech.edu> CC: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; tejas@kududyn.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, April 25, 2018 12:20:06 AM Subject: Re: Army data for attribution analysis at GT (Manos) Attachments: Nameless.txt (1.13 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil>

Sent on: Tuesday, April 24, 2018 11:59:03 PM

To: Antonakakis, Manos <manos@gatech.edu>

CC: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; tejas@kududyn.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>

Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, April 24, 2018 11:59:03 PM

Subject: Re: Army data for attribution analysis at GT (Manos)

Attachments: Nameless.txt (3.84 KB)

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, April 25, 2018 7:21:45 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; tejas@kududyn.com Subject: Re: Army data for attribution analysis at GT (Manos)

In those clusters and interwebs we trust!

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Schneck, Christopher (contr-i2o) < christopher.schneck.ctr@darpa.mil> Sent: Wednesday, April 25, 2018 2:19:34 PM To: Antonakakis, Manos; Keromytis, Angelos Cc: Farrell, Michael D; tejas@kududyn.com Subject: RE: Army data for attribution analysis at GT (Manos)

The DARPA cluster beat you to the punch. We were able to link the tall skinny persona to the individual Jason Stambaugh hours ago. :)

Chris Schneck DARPA I2O SETA Office: 571-218-4429 Cell: 571-524-3821

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Wednesday, April 25, 2018 2:16 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Cc: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; tejas@kududyn.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: Army data for attribution analysis at GT (Manos)

STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY < jason.stambaugh@us.af.mil>

To be precise --- he just emailed me. :)

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil>

Sent: Tuesday, April 24, 2018 8:20:07 PM

To: Antonakakis, Manos

Cc: Farrell, Michael D; tejas@kududyn.com; Schneck, Christopher (contr-i2o)

Subject: Re: Army data for attribution analysis at GT (Manos)

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, April 25, 2018 1:16:57 AM To: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil>; tejas@kududyn.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: Army data for attribution analysis at GT (Manos)

Perhaps we invite the local FBI folks? Chad and team?

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Farrell, Michael <Michael.Farrell@gtri.gatech.edu> Sent: Tuesday, April 24, 2018 8:15:15 PM To: Antonakakis, Manos Cc: Keromytis, Angelos; tejas@kududyn.com; Schneck, Christopher (contr-i2o) Subject: Re: Army data for attribution analysis at GT (Manos)

This is a good list. We can always add more as we remember or discover them.

The room holds 100 snugly, 80 comfortably.

—MF

> On Apr 25, 2018, at 01:13, Antonakakis, Emmanouil K <manos@gatech.edu> wrote:

>

> Cool.

>

> Chris, I would suggest we invite the following people:

> - The guys from Cyber Protection Brigade (Whalen, Daniel J CW2 USARMY CYBER PRO BDE (US)

<daniel.j.whalen14.mil@mail.mil> and his team).

> - The guys from NSA at FG (Wilson, Ryan D CIV (US) <ryan.d.wilson38.civ@mail.mil>, Tran, T T CIV (US <thaothanh.t.tran.civ@mail.mil> and their teams).

> - The guys from FM. I guess Michael can help you with the names or you can reach to Scott (scotttaylor31415@gmail.com) to get them directly.

>

> There was a gentleman in the HACCS meeting from an Air Base in San Antonio *very interested* in our APT28/Sofacy analysis. He asked me if he can attend the next EA PI meeting, and I said sure. He had no card on him and I am do not remember his name. If someone can identify who this tall, skinny guy was, we should invite him as well.

>

> Michael, am I forgetting anyone?

> > —

> Manos Antonakakis | manos@gatech.edu

> Georgia Institute of Technology

> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>

From: Keromytis, Angelos <angelos.keromytis@darpa.mil>

Sent on: Wednesday, April 25, 2018 12:20:30 AM To: Antonakakis, Manos <manos@gatech.edu>

CC: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; tejas@kududyn.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>

Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, April 25, 2018 12:20:29 AM

Subject: Re: Army data for attribution analysis at GT (Manos)

Attachments: Nameless.txt (1.86 KB)

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, November 28, 2018 9:37:15 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Call w/ Brian Pierce

My bad. I am losing my mind.

Apologies.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Sent: Wednesday, November 28, 2018 4:34:29 PM To: Antonakakis, Manos Cc: Keromytis, Angelos Subject: Re: Call w/ Brian Pierce

Dude, I called and gave you a heads up on this already. FBI case related

> On Nov 28, 2018, at 4:28 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Gents, any idea what this is about?

- >
- > Thanks,
- >
- > —

> Manos Antonakakis | manos@gatech.edu

- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- > >
- >
- > From: Wilkerson, Kiely (contr-i2o) <Christine.Wilkerson.ctr@darpa.mil>
- > Sent: Wednesday, November 28, 2018 4:12 PM
- > To: Antonakakis, Manos
- > Cc: Buggs, Ashley (contr-i2o)
- > Subject: Call w/ Brian Pierce
- >
- > Sir,
- >
- > Brian Pierce (I2O Office Director) would like to chat briefly this week.
- >
- > Are you available on Friday, November 30 at 1030 for a phone call?
- >
- > Kiely
- >
- > Kiely Wilkerson
- > DARPA I2O SETA
- > (571) 218 4821 office

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, June 19, 2018 9:11:10 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, June 19, 2018 8:25:50 PM Subject: Re: Centrulink data Attachments: Nameless.txt (1.28 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, June 19, 2018 8:05:03 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, June 19, 2018 8:04:42 PM Subject: Re: Centrulink data Attachments: Nameless.txt (732 Bytes) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, June 19, 2018 10:33:55 PM To: Smith, Jonathan <jonathan.smith@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: Centrulink data

I want one too JMS. :-)

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Smith, Jonathan <jonathan.smith@darpa.mil> Sent: Tuesday, June 19, 2018 5:31:23 PM To: Antonakakis, Manos; Keromytis, Angelos Cc: Schneck, Christopher (contr-i2o) Subject: Re: Centrulink data

Machine room for experiments in Monroe, LA:

-JMS

On 6/19/18, 5:14 PM, "Antonakakis, Manos" <manos@gatech.edu> wrote:

Yup. My thoughts exactly.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Tuesday, June 19, 2018 5:11:10 PM To: Antonakakis, Manos Cc: Smith, Jonathan; Schneck, Christopher (contr-i2o) Subject: Re: Centrulink data

That would be of extreme interest. Do. Not. Say. No.

> On Jun 19, 2018, at 16:06, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Yes. Apologies.

>

> —

- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>

>

- > _
- > From: Keromytis, Angelos <angelos.keromytis@darpa.mil>
- > Sent: Tuesday, June 19, 2018 4:05:03 PM
- > To: Antonakakis, Manos
- > Cc: Smith, Jonathan; Schneck, Christopher (contr-i2o)
- > Subject: Re: Centrulink data
- >
- > Do you mean Century Link?

>

>> On Jun 19, 2018, at 14:01, Antonakakis, Manos <manos@gatech.edu> wrote:

>>

>> Bill Bradley is the Senior Vice President, Cyber Engineering and Technical Service of Centrulink. Just walked out of my office and he wants to give me all their DNS and netflow data.

>>

>> To clarify, this includes all DoD network traffic (in late 2018 a contact was won by Centrulink to do this --- have no more details at this point) alongside several international networks, including the undersea cables that connect the various continents.

>>

- >> Do I say yes, or no?
- >>
- >> —
- >> Manos Antonakakis | manos@gatech.edu
- >> Georgia Institute of Technology
- >> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>>

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, June 19, 2018 10:22:26 PM To: Smith, Jonathan <jonathan.smith@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: Centrulink data

Both DNS and Netflow from them will be a goldmine. The fact that they have international recursive traffic -- something that we only really get from Neustar -- is just mind blowing, JMS.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Smith, Jonathan <jonathan.smith@darpa.mil> Sent: Tuesday, June 19, 2018 5:18:55 PM To: Antonakakis, Manos; Keromytis, Angelos Cc: Schneck, Christopher (contr-i2o) Subject: Re: Centrulink data

CenturyLink. They are my performers in EdgeCT. Good people. Say Yes. -JMS

On 6/19/18, 2:01 PM, "Antonakakis, Manos" <manos@gatech.edu> wrote:

Bill Bradley is the Senior Vice President, Cyber Engineering and Technical Service of Centrulink. Just walked out of my office and he wants to give me all their DNS and netflow data.

To clarify, this includes all DoD network traffic (in late 2018 a contact was won by Centrulink to do this --- have no more details at this point) alongside several international networks, including the undersea cables that connect the various continents.

Do I say yes, or no?

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, June 19, 2018 9:30:27 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> CC: Antonakakis, Manos <manos@gatech.edu>; Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, June 19, 2018 9:30:25 PM Subject: Re: Centrulink data Attachments: Nameless.txt (1.8 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, July 12, 2018 10:41:57 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, July 12, 2018 10:41:48 PM Subject: Re: CIA Case Study Attachments: Nameless.txt (2.48 KB)

From: Angelos D. Keromytis Sent on: Tuesday, June 12, 2018 11:10:15 PM Tejas Patel<tejas@kududyn.com> To: CC: Manos Antonakakis<manos@gatech.edu> Subject: Re: CMU CyLab directorship ROTFL On Jun 12, 2018, at 18:08, Tejas Patel <<u>tejas@kududyn.com</u>> wrote: Yep... but remember what I'm gonna say if I go back to DARPA... and what I'm gonna say if I ever end up at GT in the future ... :-) Tejas Patel Principal investigator **Kudu Dynamics** +1 919-332-3191 (c) tejas@kududyn.com On Tue, Jun 12, 2018 at 6:06 PM, Angelos D. Keromytis < wrote: I know. I was just expressing feelings about being his replacement. On Jun 12, 2018, at 18:04, Tejas Patel <<u>tejas@kududyn.com</u>> wrote: CyLab has an interim director right now. According to https://www.cmu.edu/ir/cirp-people/faculty-affiliates/david-brumley.html he was Director of CyLab so one assumes that was his last role... Tejas Patel Principal investigator **Kudu Dynamics** +1 919-332-3191 (c) tejas@kududyn.com On Tue, Jun 12, 2018 at 6:03 PM, Angelos D. Keromytis < > wrote: On Jun 12, 2018, at 18:01, Tejas Patel <<u>tejas@kududyn.com</u>> wrote: That would make you Brumley's replacement. -Tejas Tejas Patel Principal investigator Kudu Dynamics +1 919-332-3191 (c) tejas@kududyn.com

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Saturday, June 9, 2018 1:25:28 PM To: Tejas Patel <tejas@kududyn.com> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> Subject: Re: Comcast

We factored these data into the latest estimates we gave to Chris and JMS. We can get the data today, but we have no hardware. I do need to finalize the legal framework, as well --- by the end of June this should be done.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Tejas Patel <tejas@kududyn.com> Sent: Saturday, June 9, 2018 8:12 AM To: Antonakakis, Manos Cc: Schneck, Christopher (contr-i2o); Keromytis, Angelos; Kline, Allison (contr-i2o); Smith, Jonathan Subject: Re: Comcast

Manos:

That is great news! Do you have a feel for how much data that is and how quickly you will have to be in a position to accept that data?

Regards, Tejas

Tejas Patel Principal investigator Kudu Dynamics +1 919-332-3191 (c) tejas@kududyn.com<<u>mailto:tejas@kududyn.com</u>>

On Sat, Jun 9, 2018 at 8:08 AM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote: Folks, Jason came through. He managed to convince the Comcast lawyers to give us the following:

"The purpose of the data sharing described in this Scope of Work is to support Comcast's involvement in a research project led by the University. The Project, called "Gnomon", is being funded under a grant from the Defense Advanced Research Projects Agency (DARPA), part of the DARPA's "Harnessing Autonomy for Countering Cyberadversary Systems" (HACCS) program. The objective of the research is to develop methods to use network-sourced data to rapidly detect malware infections, and then develop methods to fix those malware infections for end users. This will rely on a range of data, from DNS data, IPFIX / Netflow data, email spam data, and security operations center (SOC) threat indicator data."

Revising the existing data sharing and as you can see we will get everything but the kitchen sink from Comcast.

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Saturday, June 9, 2018 1:21:22 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Tejas Patel <tejas@kududyn.com>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> Subject: Re: Comcast

He was not, no.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Saturday, June 9, 2018 8:13:18 AM To: Antonakakis, Manos Cc: Schneck, Christopher (contr-i2o); Tejas Patel; Kline, Allison (contr-i2o); Smith, Jonathan Subject: Re: Comcast

Nice. Was he at the PI meeting yesterday?

> On Jun 9, 2018, at 08:08, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Folks, Jason came through. He managed to convince the Comcast lawyers to give us the following:

>

> "The purpose of the data sharing described in this Scope of Work is to support Comcast's involvement in a research project led by the University. The Project, called "Gnomon", is being funded under a grant from the Defense Advanced Research Projects Agency (DARPA), part of the DARPA's "Harnessing Autonomy for Countering Cyberadversary Systems" (HACCS) program. The objective of the research is to develop methods to use network-sourced data to rapidly detect malware infections, and then develop methods to fix those malware infections for end users. This will rely on a range of data, from DNS data, IPFIX / Netflow data, email spam data, and security operations center (SOC) threat indicator data."

>

> Revising the existing data sharing and as you can see we will get everything but the kitchen sink from Comcast.

> > —

> Manos Antonakakis | manos@gatech.edu

> Georgia Institute of Technology

> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>

From: Keromytis, Angelos <angelos.keromytis@darpa.mil>

Sent on: Saturday, June 9, 2018 12:13:18 PM

To: Antonakakis, Manos <manos@gatech.edu>

CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Tejas Patel <tejas@kududyn.com>; Kline,

Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil>

Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Saturday, June 9, 2018 12:13:03 PM

Subject: Re: Comcast

Attachments: Nameless.txt (1.18 KB)

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, December 14, 2018 1:08:57 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: Confirmation on AF address space

Thanks for the heads up. Anything I need to do about this?

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Friday, December 14, 2018 8:06:36 AM To: Antonakakis, Manos Cc: Schneck, Christopher (contr-i2o) Subject: Re: Confirmation on AF address space

Mano, just FYI: Ian Crone will be the EA PM starting next Friday, until the new PM comes on board.

> On Dec 14, 2018, at 07:48, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Jason, I am in the middle of tracking down something big. You are number one in my queue, the moment I am done with this.

>

> Thanks,

>

> —

- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- > >_

> From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY < jason.stambaugh@us.af.mil>

> Sent: Thursday, December 13, 2018 2:43:10 PM

> Cc: Schneck, Christopher (contr-i2o); Smith, Jonathan

> Subject: RE: Confirmation on AF address space

>

> Manos,

>

- > It's taken a bit of time but I've received some data back that indicates at
- > (131 & 12); however, are not AF-related today. In fact, the 'powers that be'
- > are working on reclaiming that IP space to address any remaining issues.
- > They are still researching the 62 net.

>

- > I know time frames are difficult, but I was asked if we could narrow down a
- > rough timeframe to enable damage assessment actions on our end. It would be
- > highly concerning if those networks were doing what you say they were doing

> To: Antonakakis, Manos

> > Thanks! > > Jason D. Stambaugh, SA, USAF > AFOSI Cyber Investigations & Ops > Deputy PM for Manpower & Training > > Comm: (571) 305-8850 > DSN: 240-8850 > NSTS: 918-5739 > > SIPR: jason.d.stambaugh2.mil@mail.smil.mil > JWICS: jason.stambaugh@af.ic.gov > > > -----Original Message-----> From: Antonakakis, Manos <manos@gatech.edu> > Sent: Wednesday, November 21, 2018 10:25 AM > To: SCHILCHER, RYAN D SA USAF AFOSI AFOSI/3 FIS/CI&O > <ryan.schilcher@us.af.mil>; STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY > <jason.stambaugh@us.af.mil> > Cc: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; > Keromytis, Angelos <angelos.keromytis@darpa.mil>; Smith, Jonathan > <jonathan.smith@darpa.mil> > Subject: [Non-DoD Source] Confirmation on AF address space > > Gentlemen, back in the day I received from DARPA a list of address space > that is related with AF network operations. Run this through our system to > assess any targeting against the AF networks. > > Can you please confirm that these three networks are AF related? > > - 62.255.146.0/24 > - 12.10.134.0/24 > - 131.8.51.0/24 > > Assuming they are AF related, can you please rank them with the respect of > importance? > > (If you have a complete list of AF network address space, please send them > over so I can asses targeting more efficiently/accurately) > > Many thanks! > > -> Manos Antonakakis | manos@gatech.edu > Georgia Institute of Technology

> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>

From: Rodney Joffe<rjoffe@centergate.com>

Sent on: Saturday, June 29, 2019 5:38:35 AM

To: McConnell, Kirk (Armed Services)<Kirk_McConnell@armed-services.senate.gov>

CC: Antonakakis Manos<manos@gatech.edu>

Subject: Re: connection for briefing on Enhanced Attribution

Jeez

What a piece of work! Glad you don't have any influence with DARPA's budget that Michael relies on.

Manos?

On Jun 29, 2019, at 12:31 AM, McConnell, Kirk (Armed Services) <<u>Kirk_McConnell@armed-services.senate.gov</u>> wrote:

Well, Michael is quite a guy isn't he?

Sent from my iPhone Begin forwarded message:

From: "Farrell, Michael" <<u>michael.farrell@iisp.gatech.edu</u>>
Date: June 28, 2019 at 4:41:00 PM EDT
To: "McConnell, Kirk (Armed Services)" <<u>Kirk McConnell@armed-services.senate.gov</u>>
Cc: lan Crone <<u>ian.crone@darpa.mil</u>>, "<u>lisa.heyes@darpa.mil</u>" < lisa.heyes@darpa.mil>
Subject: Re: connection for briefing on Enhanced Attribution

Kirk,

Thanks for your interest in Georgia Tech research. However, we (GT) have no comment or position on the below. In fact, going forward please contact DARPA directly about any and all issues or questions or comments related to the enhanced attribution program. The DARPA congressional liaison and program manager are copied on this message and can respond, as needed. The Georgia Tech/GTRI PI and Co-PIs on this research program are not the appropriate POCs for any questions, comments, or concerns.

The government, not GT, makes decisions related to funding and transition from research at DARPA to other entities. The focus of Manos, myself and other Co-PIs is completely on doing impactful research. We follow contractual requirements and relevant policies for our part of this program (and GT is only one part), and devote our energy to 'creating the next' in cyber security.

Best,

Michael

On Jun 25, 2019, at 12:24, McConnell, Kirk (Armed Services) <

FYI. Andy is on the SAC-D staff. Andrew Pahutski from SCO is seeking approval from us on the Hill to shift some SCO money to Enhanced Attribution.

From: McConnell, Kirk (Armed Services) Sent: Tuesday, June 25, 2019 12:22 PM To: Heyes, Lisa (<u>lisa.heyes@darpa.mil</u>) <<u>lisa.heyes@darpa.mil</u>>; Vanlandingham, Andy (Appropriations) < Andy_Vanlandingham@appro.senate.gov> Subject: connection for briefing on Enhanced Attribution Lisa – Andy Vanlandingham is interested in learning more about DARPA's Enhanced Attribution cybersecurity program. It turns out that a current SCO program manager whom we know well is moving over to Cyber Command to help with the transition of this DARPA program to CYBERCOM. Thanks, Kirk From: Angelos D. Keromytis Sent on: Wednesday, October 25, 2017 4:41:18 PM To: Antonakakis, Manos <manos@gatech.edu> Subject: Re: CV

Cool.

> On Oct 25, 2017, at 11:37, Antonakakis, Manos <manos@gatech.edu> wrote:

> Sent: Wednesday, October 25, 2017 10:35 AM

> To: Sarkar, Vivek; Gavrilovska Habl, Ada; Orso, Alessandro; Lee, Wenke; Kim, Taesoo; Navathe, Shamkant B; Lance Fortnow; Ammar, Mostafa H; Payton, Kenya V; Antonakakis, Manos

> Subject: FW: CV

>

> Stelios just sent his CV. See attached.

>

> Vivek, have you been in touch with him about possible dates? Hopefully the week of 11/27 works for him. He did not want to visit before Thanksgiving and several of us are away the week of December 4.

> He can come 11/27 evening, do the talk on the 28th and leave on the 29th. Alternatively, he can come on the 29th, talk on the 30th and get done on December 1st. There is a DARPA PI meeting on December 1st but those attending it can meet Stelios on Thursday.

>

>

> Also copying Manos whom he should meet. Please include him as you work to figure out the visit dates.

> Mustaque

>

>

> On 10/25/17, 10:24 AM, "Stelios Sidiroglou-Douskos" <stelios@csail.mit.edu> wrote:

> Hi Mustaque,

>

>

> Attached you will find an updated CV.

> Please let me know if you need anything else from my end.

>

> best,

> Stelios

>

>

>

>

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, May 8, 2018 7:08:54 PM To: Tejas Patel <tejas@kududyn.com> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> Subject: Re: Cyber Threat Initiatives

Will do, yes.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Tejas Patel <tejas@kududyn.com> Sent: Tuesday, May 8, 2018 12:33:45 PM To: Antonakakis, Manos Cc: Schneck, Christopher (contr-i2o); Keromytis, Angelos; Smith, Jonathan Subject: Re: Cyber Threat Initiatives

Manos,

Likewise. Let me know logistics and I'll work it into my schedule.

Regards, Tejas

Tejas Patel Principal investigator Kudu Dynamics +1 919-332-3191 (c) tejas@kududyn.com<<u>mailto:tejas@kududyn.com</u>>

On Tue, May 8, 2018 at 8:41 AM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote: Yes, Sir. Will do.

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

Manos,

I planned on coming out on the 7th so count me in for the meetings. Let me know when you have nailed down a time for the morning meeting.

From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>> Sent: Tuesday, May 8, 2018 7:20:54 AM

To: Antonakakis, Manos; Keromytis, Angelos; Smith, Jonathan; tejas@kududyn.com<<u>mailto:tejas@kududyn.com</u>> Subject: RE: Cyber Threat Initiatives

Chris Schneck DARPA I2O SETA Office: 571-218-4429 Cell: 571-524-3821

-----Original Message-----

From: Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> Sent: Monday, May 7, 2018 4:38 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>; Smith, Jonathan <jonathan.smith@darpa.mil<mailto:jonathan.smith@darpa.mil>>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>>; tejas@kududyn.com< <u>mailto:tejas@kududyn.com</u>> Subject: Fw: Cyber Threat Initiatives

Not sure if any/all of you need to be here. We would be happy to have you.

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Monday, May 7, 2018 4:36 PM To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY; Farrell, Michael D; Mitchell, Michael F Cc: Demar, Jeremy; Keromytis, Angelos; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC Subject: Re: Cyber Threat Initiatives

Very cool, Jason.

I will work with Michael to get you first thing in the morning. We will have breakfast and lunch served at the meeting, which will be held at Klaus Advance Computer Building. We will nail down the room as we get closer.

If you do not mind give me a call **so is a set of the s**

Thanks,

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY

<jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>>

Sent: Monday, May 7, 2018 4:32:21 PM

To: Antonakakis, Manos; Farrell, Michael D; Mitchell, Michael F

Cc: Demar, Jeremy; Keromytis, Angelos; OGBUAWA, OKECHUKWU N SA USAF AFOSI

AFOSI/ICON; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY; GEE, TYSON L SA

USAF AFOSI AFOSI/XRC Subject: RE: Cyber Threat Initiatives

Manos,

I am tentatively projecting 3 individuals (me & 2 others). To my knowledge, there are no dietary restrictions but I will verify.

Thanks very much!

Jason D. Stambaugh, SA, USAF Deputy PM for Cyber Training AFOSI Cyber Investigations & Ops

Comm: (571) 305-8850 DSN: 240-8850 NSTS: 918-5739

SIPR: jason.d.stambaugh2.mil@mail.smil.mil<mailto:jason.d.stambaugh2.mil@mail.smil.mil> JWICS: jason.stambaugh@af.ic.gov<mailto:jason.stambaugh@af.ic.gov>

-----Original Message-----

From: Antonakakis, Manos [mailto:manos@gatech.edu<mailto:manos@gatech.edu>]

Sent: Monday, May 7, 2018 11:27 AM

To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY

<jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>>;

Farrell, Michael D <Michael.Farrell@gtri.gatech.edu<mailto:Michael.Farrell@gtri.gatech.edu>>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu<mailto:michael.mitchell@ece.gatech.edu>>

Cc: Demar, Jeremy <jdemar3@gatech.edu<mailto:jdemar3@gatech.edu>>; Keromytis, Angelos

<angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON

<okechukwu.ogbuawa@us.af.mil<mailto:okechukwu.ogbuawa@us.af.mil>>; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY

<stephynie.velez@us.af.mil<mailto:stephynie.velez@us.af.mil>>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC

<tyson.gee@us.af.mil<mailto:tyson.gee@us.af.mil>>

Subject: [Non-DoD Source] Re: Cyber Threat Initiatives

Jason, I am setting up a room for the day. Can you give me a count of people you will have with you, and if there are any dietary restrictions?

Michael M., this is for your records --- the visit on June 7th, right before the PI meeting.

Thanks,

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>> Sent: Monday, May 7, 2018 11:15:27 AM To: Antonakakis, Manos; Farrell, Michael D Cc: Demar, Jeremy; Keromytis, Angelos; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC Subject: RE: Cyber Threat Initiatives

Great! What time would you like to sync up...and where?

Thanks & Regards,

Jason D. Stambaugh, SA, USAF Deputy PM for Cyber Training AFOSI Cyber Investigations & Ops

Comm: (571) 305-8850 DSN: 240-8850 NSTS: 918-5739

SIPR: jason.d.stambaugh2.mil@mail.smil.mil<mailto:jason.d.stambaugh2.mil@mail.smil.mil> JWICS: jason.stambaugh@af.ic.gov<mailto:jason.stambaugh@af.ic.gov>

-----Original Message-----

From: Antonakakis, Manos [mailto:manos@gatech.edu<mailto:manos@gatech.edu>]

Sent: Wednesday, May 2, 2018 5:28 PM

To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY

<jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>>;

Farrell, Michael D < Michael.Farrell@gtri.gatech.edu < mailto:Michael.Farrell@gtri.gatech.edu > >

Cc: Demar, Jeremy <jdemar3@gatech.edu<mailto:jdemar3@gatech.edu>>; Keromytis, Angelos

<angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON

<okechukwu.ogbuawa@us.af.mil<mailto:okechukwu.ogbuawa@us.af.mil>>; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY

<stephynie.velez@us.af.mil<mailto:stephynie.velez@us.af.mil>>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil<mailto:tyson.gee@us.af.mil>> Subject: [Non-DoD Source] Re: Cyber Threat Initiatives

This works for my team too. Booked my calendar for the entire morning.

Thanks,

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY

<jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>>

Sent: Wednesday, May 2, 2018 8:41:13 AM

To: Farrell, Michael D

Cc: Antonakakis, Manos; Demar, Jeremy; Keromytis, Angelos; OGBUAWA,

OKECHUKWU N SA USAF AFOSI AFOSI/ICON; VELEZ, STEPHYNIE E SA USAF AFOSI

AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC

Subject: RE: Cyber Threat Initiatives

Michael,

The morning of the 7th sounds great to me. I'll check with my colleagues to determine their availability.

Thanks & Regards,

Jason D. Stambaugh, SA, USAF Deputy PM for Cyber Training AFOSI Cyber Investigations & Ops

Comm: (571) 305-8850 DSN: 240-8850 NSTS: 918-5739

SIPR: jason.d.stambaugh2.mil@mail.smil.mil<mailto:jason.d.stambaugh2.mil@mail.smil.mil> JWICS: jason.stambaugh@af.ic.gov<mailto:jason.stambaugh@af.ic.gov>

-----Original Message-----

From: Farrell, Michael [mailto:Michael.Farrell@gtri.gatech.edu <mailto:Michael.Farrell@gtri.gatech.edu >] Sent: Wednesday, May 2, 2018 8:33 AM To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>> Cc: Antonakakis, Emmanouil K <manos@gatech.edu<mailto:manos@gatech.edu>>; Demar, Jeremy <jdemar3@gatech.edu<mailto:jdemar3@gatech.edu>>; Keromytis, Angelos <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON <okechukwu.ogbuawa@us.af.mil<mailto:okechukwu.ogbuawa@us.af.mil>>; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY <stephynie.velez@us.af.mil<mailto:stephynie.velez@us.af.mil>>; GEE, TYSON L SA USAF AFOSI AFOSI/XRCY <tyson.gee@us.af.mil<mailto:tyson.gee@us.af.mil>> Subject: [Non-DoD Source] Re: Cyber Threat Initiatives

Hi Jason,

We'd be happy to sit down, as Manos mentioned. Also understand that it makes sense logistically to try and tag it into an existing trip. Happy to try and accommodate.

June 8 itself will be quite busy for us in hosting the meeting all day.

June 7 I have a few prior commitments already on the books, but I'm not needed for the entire session so this could work. I'd suggest morning on this day instead I afternoon as some of the team has a meeting in the afternoon already planned.

Look forward to hosting you.

Best,

Michael

> On May 2, 2018, at 08:12, STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>> wrote:

>

> Manos,

>

> We would love to come to Georgia! We can absolutely keep this at unclass

for the meeting. If the other team members need to make contact afterward via high-side channels, we can work that out.

>

> Would it be possible to schedule a day around the 8th to have the more detailed meeting, since we'll already be in town?

>

- > Thanks & Regards,
- >
- > Jason D. Stambaugh, SA, USAF
- > Deputy PM for Cyber Training
- > AFOSI Cyber Investigations & Ops
- >
- > Comm: (571) 305-8850
- > DSN: 240-8850
- > NSTS: 918-5739
- >

> SIPR: jason.d.stambaugh2.mil@mail.smil.mil<mailto:jason.d.stambaugh2.mil@mail.smil.mil>

- > JWICS: jason.stambaugh@af.ic.gov<mailto:jason.stambaugh@af.ic.gov>
- >
- > -----Original Message-----
- > From: Antonakakis, Manos [mailto:manos@gatech.edu<mailto:manos@gatech.edu>]
- > Sent: Tuesday, May 1, 2018 8:18 PM
- > To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY
- <jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>>; Farrell, Michael D
- <Michael.Farrell@gtri.gatech.edu<mailto:Michael.Farrell@gtri.gatech.edu>>; Demar, Jeremy
- <jdemar3@gatech.edu<mailto:jdemar3@gatech.edu>>
- > Cc: Keromytis, Angelos <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>; OGBUAWA, OKECHUKWU N
- SA USAF AFOSI AFOSI/ICON <okechukwu.ogbuawa@us.af.mil<mailto:okechukwu.ogbuawa@us.af.mil>>; VELEZ, STEPHYNIE E
- SA USAF AFOSI AFOSI/XRCY <stephynie.velez@us.af.mil<mailto:stephynie.velez@us.af.mil>>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil<mailto:tyson.gee@us.af.mil>>
- > Subject: [Non-DoD Source] Re: Cyber Threat Initiatives
- >
- > Great Jason.
- >

> Michael Farrell and Jeremy Demar should be in this meeting too. Michael is CoPI (from GTRI) in this project and holds all necessary clearances for discussions that needs to happen on the high side. Jeremy came out for the Navy long time ago, and he is leading threat research in my team. I suspect that you will have to work with him long-tem for any data sharing between the two teams.

>

> Now, we could host you here at GT/GTRI and also have space for a classified meeting made available. Note, only Michael for my team can attend such a meeting. Thus, it would be the most beneficial for me to keep everything at UNCLASSIFIED//FOUO level.

>

> If you want us to fly out, we could. Whatever works best for you and your team.

>

- > Angele, I am not sure if you, JMS, Tejas or Chris should also attend this meeting.
- >
- > Thanks,
- >
- > -

> Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>>

- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- > >

<jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>>

- > Sent: Monday, April 30, 2018 8:59:02 AM
- > To: Antonakakis, Manos

> Cc: Keromytis, Angelos; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON;

VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC

> Subject: RE: Cyber Threat Initiatives

>

> Great! We will likely be in attendance for the Atlanta event on 8 Jun. We should shoot for a date between 25 & 29 June for a more in-depth, follow-on meeting. Both Stephynie and I will be in the office that week, unless one of us has to make a trip to Hawaii.

>

> The first week of July looks pretty good too.

>

> Thanks & Regards,

>

- > Jason D. Stambaugh, SA, USAF
- > Deputy PM for Cyber Training
- > AFOSI Cyber Investigations & Ops
- >
- > Comm: (571) 305-8850
- > DSN: 240-8850
- > NSTS: 918-5739

>

- > SIPR: jason.d.stambaugh2.mil@mail.smil.mil<mailto:jason.d.stambaugh2.mil@mail.smil.mil>
- > JWICS: jason.stambaugh@af.ic.gov<mailto:jason.stambaugh@af.ic.gov>
- >
- >

> -----Original Message-----

> From: Antonakakis, Manos [mailto:manos@gatech.edu<mailto:manos@gatech.edu>]

- > Sent: Friday, April 27, 2018 5:08 PM
- > To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY

<jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>>

> Cc: Keromytis, Angelos <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>; OGBUAWA, OKECHUKWU N

SA USAF AFOSI AFOSI/ICON <okechukwu.ogbuawa@us.af.mil<mailto:okechukwu.ogbuawa@us.af.mil>>; VELEZ, STEPHYNIE E

SA USAF AFOSI AFOSI/XRCY <stephynie.velez@us.af.mil<mailto:stephynie.velez@us.af.mil>>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil<mailto:tyson.gee@us.af.mil>>

> Subject: [Non-DoD Source] Re: Cyber Threat Initiatives

>

> Hey Jason, good to hear from you!

>

> Yes, lets get something on the calendar and go from there. In the HACCS meeting you saw just a small set of what we are working on. We plan to expose a larger portion of their operations (current and past) in the upcoming PI meeting in Atlanta (June 8th). I would suggest we schedule something for mid/late June so you and your team will get the opportunity to be exposed to the full spectrum of research we are doing on this particular

> From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Monday, May 7, 2018 9:44:05 PM To: Antonakakis, Manos <manos@gatech.edu>; Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; tejas@kududyn.com Subject: RE: Cyber Threat Initiatives

I don't know yet. Plan without me.

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Monday, May 7, 2018 4:38 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; tejas@kududyn.com Subject: Fw: Cyber Threat Initiatives

Not sure if any/all of you need to be here. We would be happy to have you.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos

Sent: Monday, May 7, 2018 4:36 PM

To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY; Farrell, Michael D; Mitchell, Michael F Cc: Demar, Jeremy; Keromytis, Angelos; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC Subject: Re: Cyber Threat Initiatives

Very cool, Jason.

I will work with Michael to get you first thing in the morning. We will have breakfast and lunch served at the meeting, which will be held at Klaus Advance Computer Building. We will nail down the room as we get closer.

If you do not mind give me a call so I can assess the time we want based on the things you and your team want to hear from us.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil>

Sent: Monday, May 7, 2018 4:32:21 PM

To: Antonakakis, Manos; Farrell, Michael D; Mitchell, Michael F

Cc: Demar, Jeremy; Keromytis, Angelos; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC

Subject: RE: Cyber Threat Initiatives

Manos,

I am tentatively projecting 3 individuals (me & 2 others). To my knowledge, there are no dietary restrictions but I will verify.

Thanks very much!

Jason D. Stambaugh, SA, USAF Deputy PM for Cyber Training AFOSI Cyber Investigations & Ops

Comm: (571) 305-8850 DSN: 240-8850 NSTS: 918-5739

SIPR: jason.d.stambaugh2.mil@mail.smil.mil JWICS: jason.stambaugh@af.ic.gov

-----Original Message-----From: Antonakakis, Manos [mailto:manos@gatech.edu] Sent: Monday, May 7, 2018 11:27 AM To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil>; Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu> Cc: Demar, Jeremy <jdemar3@gatech.edu>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON <okechukwu.ogbuawa@us.af.mil>; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY <stephynie.velez@us.af.mil>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil> Subject: [Non-DoD Source] Re: Cyber Threat Initiatives

Jason, I am setting up a room for the day. Can you give me a count of people you will have with you, and if there are any dietary restrictions?

Michael M., this is for your records --- the visit on June 7th, right before the PI meeting.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY < jason.stambaugh@us.af.mil>

Sent: Monday, May 7, 2018 11:15:27 AM

To: Antonakakis, Manos; Farrell, Michael D

Cc: Demar, Jeremy; Keromytis, Angelos; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC Subject: RE: Cyber Threat Initiatives

Great! What time would you like to sync up...and where?

Thanks & Regards,

Jason D. Stambaugh, SA, USAF Deputy PM for Cyber Training AFOSI Cyber Investigations & Ops Comm: (571) 305-8850 DSN: 240-8850 NSTS: 918-5739

SIPR: jason.d.stambaugh2.mil@mail.smil.mil JWICS: jason.stambaugh@af.ic.gov

-----Original Message-----From: Antonakakis, Manos [mailto:manos@gatech.edu] Sent: Wednesday, May 2, 2018 5:28 PM To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil>; Farrell, Michael D <Michael.Farrell@gtri.gatech.edu> Cc: Demar, Jeremy <jdemar3@gatech.edu>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON <okechukwu.ogbuawa@us.af.mil>; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY <stephynie.velez@us.af.mil>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil> Subject: [Non-DoD Source] Re: Cyber Threat Initiatives

This works for my team too. Booked my calendar for the entire morning.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil> Sent: Wednesday, May 2, 2018 8:41:13 AM To: Farrell, Michael D Cc: Antonakakis, Manos; Demar, Jeremy; Keromytis, Angelos; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC Subject: RE: Cyber Threat Initiatives

Michael,

The morning of the 7th sounds great to me. I'll check with my colleagues to determine their availability.

Thanks & Regards,

Jason D. Stambaugh, SA, USAF Deputy PM for Cyber Training AFOSI Cyber Investigations & Ops

Comm: (571) 305-8850 DSN: 240-8850 NSTS: 918-5739

SIPR: jason.d.stambaugh2.mil@mail.smil.mil JWICS: jason.stambaugh@af.ic.gov Cc: Antonakakis, Emmanouil K <manos@gatech.edu>; Demar, Jeremy <jdemar3@gatech.edu>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON <okechukwu.ogbuawa@us.af.mil>; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY <stephynie.velez@us.af.mil>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil> Subject: [Non-DoD Source] Re: Cyber Threat Initiatives

Hi Jason,

We'd be happy to sit down, as Manos mentioned. Also understand that it makes sense logistically to try and tag it into an existing trip. Happy to try and accommodate.

June 8 itself will be quite busy for us in hosting the meeting all day.

June 7 I have a few prior commitments already on the books, but I'm not needed for the entire session so this could work. I'd suggest morning on this day instead I afternoon as some of the team has a meeting in the afternoon already planned.

Look forward to hosting you.

Best,

Michael

> On May 2, 2018, at 08:12, STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil> wrote:

- >
- > Manos,
- >

> We would love to come to Georgia! We can absolutely keep this at unclass for the meeting. If the other team members need to make contact afterward via high-side channels, we can work that out.

>

> Would it be possible to schedule a day around the 8th to have the more detailed meeting, since we'll already be in town?

>

> Thanks & Regards,

>

- > Jason D. Stambaugh, SA, USAF
- > Deputy PM for Cyber Training
- > AFOSI Cyber Investigations & Ops

>

- > Comm: (571) 305-8850
- > DSN: 240-8850
- > NSTS: 918-5739

>

- > SIPR: jason.d.stambaugh2.mil@mail.smil.mil
- > JWICS: jason.stambaugh@af.ic.gov

>

- > -----Original Message-----
- > From: Antonakakis, Manos [mailto:manos@gatech.edu]
- > Sent: Tuesday, May 1, 2018 8:18 PM
- > To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY < jason.stambaugh@us.af.mil>; Farrell, Michael D
- <Michael.Farrell@gtri.gatech.edu>; Demar, Jeremy <jdemar3@gatech.edu>
- > Cc: Keromytis, Angelos <angelos.keromytis@darpa.mil>; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON <okechukwu.ogbuawa@us.af.mil>; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY <stephynie.velez@us.af.mil>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil>
- > Subject: [Non-DoD Source] Re: Cyber Threat Initiatives

>

> Great Jason.

> Michael Farrell and Jeremy Demar should be in this meeting too. Michael is CoPI (from GTRI) in this project and holds all necessary clearances for discussions that needs to happen on the high side. Jeremy came out for the Navy long time ago, and he is leading threat research in my team. I suspect that you will have to work with him long-tem for any data sharing between the two teams.

>

>

> Now, we could host you here at GT/GTRI and also have space for a classified meeting made available. Note, only Michael for my team can attend such a meeting. Thus, it would be the most beneficial for me to keep everything at UNCLASSIFIED//FOUO level.

>

> If you want us to fly out, we could. Whatever works best for you and your team.

>

>

> Angele, I am not sure if you, JMS, Tejas or Chris should also attend this meeting.

- > Thanks,
- >
- > -
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- >

- > Sent: Monday, April 30, 2018 8:59:02 AM
- > To: Antonakakis, Manos

> Cc: Keromytis, Angelos; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC

- > Subject: RE: Cyber Threat Initiatives
- >

> Great! We will likely be in attendance for the Atlanta event on 8 Jun. We should shoot for a date between 25 & 29 June for a more in-depth, follow-on meeting. Both Stephynie and I will be in the office that week, unless one of us has to make a trip to Hawaii.

>

- > The first week of July looks pretty good too.
- > >
- > Thanks & Regards,
- >
- > Jason D. Stambaugh, SA, USAF
- > Deputy PM for Cyber Training
- > AFOSI Cyber Investigations & Ops
- >
- > Comm: (571) 305-8850
- > DSN: 240-8850
- > NSTS: 918-5739
- >
- > SIPR: jason.d.stambaugh2.mil@mail.smil.mil
- > JWICS: jason.stambaugh@af.ic.gov
- >
- >

- > From: Antonakakis, Manos [mailto:manos@gatech.edu]
- > Sent: Friday, April 27, 2018 5:08 PM
- > To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil>

> Cc: Keromytis, Angelos <angelos.keromytis@darpa.mil>; OGBUAWA, OKECHUKWU N SA USAF AFOSI AFOSI/ICON <okechukwu.ogbuawa@us.af.mil>; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY <stephynie.velez@us.af.mil>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil>

> From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil>

> -----Original Message-----

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Monday, August 28, 2017 2:35:01 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>; dagon@sudo.sh Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Monday, August 28, 2017 2:34:59 PM Subject: Re: DARPA domains Attachments: Nameless.txt (961 Bytes) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, November 29, 2017 3:43:52 AM To: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB <danielle.gambino@us.af.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>; Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil> Subject: Re: DARPA EA PI Meeting - Draft Slides Due

Danielle, you should have the slides via AMRDEC.

As I noted in the AMRDEC email, while I have no problem presenting them in the PI meeting, I think we should restrict the electronic distribution of this deck. There are too many TTPs listed that if they are accidentally leaked, we will be loosing unique sources and methods we are using for this type of attribution analysis.

I will leave the final decision to Angelos, Tejas and Tom on this one.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Tuesday, November 28, 2017 5:32:06 PM To: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB Cc: Keromytis, Angelos; Patel, Tejas (contr-i2o); Maddern, Thomas (contr-i2o) Subject: Re: DARPA EA PI Meeting - Draft Slides Due

Hey Danielle, I will send over the slide late Wednesday. Tejas and/or Angelos can explain the reason.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB <danielle.gambino@us.af.mil>

Sent: Tuesday, November 28, 2017 9:39:29 AM

Cc: Keromytis, Angelos; Patel, Tejas (contr-i2o); Maddern, Thomas (contr-i2o); GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB

Subject: DARPA EA PI Meeting - Draft Slides Due

Good Morning,

This is a friendly reminder that your draft presentation material is due within three (3) days prior to each presentation. Please upload your slides into the TFIMS file storage area. Alternatively, you are welcome to send the slides via AMRDEC

To: ncostigan@behaviosec.com; ideutschmann@behaviosec.com; Brian Kirk; wrightr@ainfosec.com; dorar@ainfosec.com; scott.tenaglia@invincea.com; chris.greamo@invincea.com; Antonakakis, Manos; mikef@kududyn.com; James Nuttall; Ben.Radford@soteradefense.com; Emmy.thompson@soteradefense.com; James.lobb@soteradefense.com; Michelle Lossau; schwab@isi.edu; brigidannc@usc.edu

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, November 29, 2017 4:21:47 PM To: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB <danielle.gambino@us.af.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>; Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil> Subject: Re: DARPA EA PI Meeting - Presentation Slide Distribution Statements

Folks, I just sent the properly annotated slides to everyone but Angelos. At this point I do not think there is anything else that needs to be done from the GT side for the PI meeting.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB < danielle.gambino@us.af.mil>

Sent: Wednesday, November 29, 2017 10:46:19 AM

- To: ncostigan@behaviosec.com; ideutschmann@behaviosec.com; Brian Kirk; wrightr@ainfosec.com; dorar@ainfosec.com; scott.tenaglia@twosixlabs.com; Antonakakis, Manos; mikef@kududyn.com; James Nuttall;
- Ben.Radford@soteradefense.com; Emmy.thompson@soteradefense.com; James.lobb@soteradefense.com; schwab@ici.edu; brigidapps@usc.edu
- schwab@isi.edu; brigidannc@usc.edu
- Cc: Keromytis, Angelos; Patel, Tejas (contr-i2o); Maddern, Thomas (contr-i2o)

Subject: DARPA EA PI Meeting - Presentation Slide Distribution Statements

Good Morning,

In preparation for Friday's PI meeting, we need to ensure the distribution markings are properly added to your slides.

Kudu and GT please add the following markings to your slides:

DISTRIBUTION F. Further Distribution authorized only as directed by AFRL/RIGB 525 Brooks Road, Rome NY 13441 or higher DoD authority. 29 NOV 2017.

All other teams, please add the following to your slides:

DISTRIBUTION C. Distribution authorized to U.S. Government Agencies and their contractors; Administrative or Operational Use; 29 NOV 2017. Other requests for this document shall be referred to AFRL/RIGB 525 Brooks Road, Rome NY 13441.

Let me know if you have any questions.

v/r, Danielle From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Monday, December 4, 2017 9:38:52 PM To: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB <danielle.gambino@us.af.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>; Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil> Subject: Re: DARPA EA PI Meeting Slides

Just sent them to you via ARMDEC.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB <danielle.gambino@us.af.mil>

Sent: Monday, December 4, 2017 4:05:17 PM

To: ncostigan@behaviosec.com; ideutschmann@behaviosec.com; Brian Kirk; wrightr@ainfosec.com;

scott.tenaglia@twosixlabs.com; Antonakakis, Manos; mikef@kududyn.com; James Nuttall;

Ben.Radford@soteradefense.com; schwab@isi.edu

Cc: Keromytis, Angelos; Patel, Tejas (contr-i2o); Maddern, Thomas (contr-i2o); GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB

Subject: RE: DARPA EA PI Meeting Slides

All,

My apologies, please keep the distro statement on the slides presented on Friday.

For future presentations, please do not include the distro statement.

Danielle

-----Original Message-----

From: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB

Sent: Monday, December 04, 2017 3:13 PM

To: 'ncostigan@behaviosec.com' <ncostigan@behaviosec.com>; 'ideutschmann@behaviosec.com'

<ideutschmann@behaviosec.com>; 'Brian Kirk' <bkirk@behaviosec.com>; 'wrightr@ainfosec.com'

<wrightr@ainfosec.com>; 'scott.tenaglia@twosixlabs.com' <scott.tenaglia@twosixlabs.com>; 'Antonakakis, Manos'
<manos@gatech.edu>; 'mikef@kududyn.com' <mikef@kududyn.com>; 'James Nuttall' <james@kududyn.com>;
'Ben.Radford@soteradefense.com' <Ben.Radford@soteradefense.com>; 'schwab@isi.edu' <schwab@isi.edu>
Cc: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>; 'Maddern,
Thomas (contr-i2o)' <Thomas.Maddern.ctr@darpa.mil>; GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB
<danielle.gambino@us.af.mil>

Subject: DARPA EA PI Meeting Slides

Good Afternoon,

It was so great seeing everyone on Friday! This is a friendly reminder that the final version of your presentations are due NLT December 15. Please send them to everyone on the "cc" line via AMRDEC SAFE.

Angelos has requested that the distribution statements be removed from your presentations.

From:	Keromytis, Angelos <angelos.keromytis@darpa.mil></angelos.keromytis@darpa.mil>
Sent on:	Wednesday, November 29, 2017 2:45:12 PM
To:	GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB <danielle.gambino@us.af.mil></danielle.gambino@us.af.mil>
CC:	Antonakakis, Manos <manos@gatech.edu>; Patel, Tejas (contr-i2o)<tejas.patel.ctr@darpa.mil>;</tejas.patel.ctr@darpa.mil></manos@gatech.edu>
	Maddern, Thomas (contr-i2o) <thomas.maddern.ctr@darpa.mil></thomas.maddern.ctr@darpa.mil>
Signed by:	KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, November 29, 2017 2:45:12 PM
Subject:	Re: DARPA EA PI Slides Distro Statements
Attachments: Nameless.txt (3.66 KB)	

I think only these and Kudu's need to be Distro F. The rest can be B or C. On Nov 29, 2017, at 09:35, GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB <<u>danielle.gambino@us.af.mil</u>> wrote:

Manos: Thank you - downloaded successfully.

Angelos, Tejas, Tom: We need distribution markings on all the EA slides being presented on Friday - these especially. Attached guidance as a reference. i.e. "DISTRIBUTION STATEMENT F. Further Distribution authorized only as directed by AFRL/RIGB 525 Brooks Road, Rome NY 13441 or higher DoD authority. DD MMM YYYY." Please advise how you would like the statement to read and I will send it out to all the performers.

Kindest Regards,

Danielle

-----Original Message-----

From: Antonakakis, Manos [mailto:manos@gatech.edu]

Sent: Tuesday, November 28, 2017 10:44 PM

To: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB < <u>danielle.gambino@us.af.mil</u>>

Cc: Keromytis, Angelos <<u>angelos.keromytis@darpa.mil</u>>; Patel, Tejas (contr-i2o) < <u>tejas.patel.ctr@darpa.mil</u>>; Maddern, Thomas (contr-i2o) <<u>Thomas.Maddern.ctr@darpa.mil</u>>;

Subject: [Non-DoD Source] Re: DARPA EA PI Meeting - Draft Slides Due

Danielle, you should have the slides via AMRDEC.

As I noted in the AMRDEC email, while I have no problem presenting them in the PI meeting, I think we should restrict the electronic distribution of this deck. There are too many TTPs listed that if they are accidentally leaked, we will be loosing unique sources and methods we are using for this type of attribution analysis.

I will leave the final decision to Angelos, Tejas and Tom on this one.

Thanks,

Manos Antonakakis | manos@gatech.edu

Georgia Institute of Technology

FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos

Sent: Tuesday, November 28, 2017 5:32:06 PM

To: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB

Cc: Keromytis, Angelos; Patel, Tejas (contr-i2o); Maddern, Thomas (contr-i2o)

Subject: Re: DARPA EA PI Meeting - Draft Slides Due

Hey Danielle, I will send over the slide late Wednesday. Tejas and/or Angelos can explain the reason.

Thanks,

Manos Antonakakis | manos@gatech.edu

Georgia Institute of Technology

FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB < danielle.gambino@us.af.mil>

Sent: Tuesday, November 28, 2017 9:39:29 AM

To: ncostigan@behaviosec.com; ideutschmann@behaviosec.com; Brian Kirk; wrightr@ainfosec.com; dorar@ainfosec.com; scott.tenaglia@invincea.com; scott.tenaglia@invincea.com; scott.tenaglia@invincea.com;

chris.greamo@invincea.com; Antonakakis, Manos; <u>mikef@kududyn.com</u>; James Nuttall; <u>Ben.Radford@soteradefense.com</u>; <u>Emmy.thompson@soteradefense.com</u>; James.lobb@soteradefense.com; Michelle Lossau; <u>schwab@isi.edu</u>; <u>brigidannc@usc.edu</u>

Cc: Keromytis, Angelos; Patel, Tejas (contr-i2o); Maddern, Thomas (contr-i2o); GAMBINO, DANIELLE M CIV USAF AFMC AFRL/RIGB

Subject: DARPA EA PI Meeting - Draft Slides Due

Good Morning,

This is a friendly reminder that your draft presentation material is due within three (3) days prior to each presentation. Please upload your slides into the TFIMS file storage area. Alternatively, you are welcome to send the slides via AMRDEC (in case TFIMS is giving you a hard time).

Looking forward to seeing everyone on Friday!

Safe Travels,

Danielle

Computer Scientist, Cyber Operations Branch (RIGB) Air Force Research Laboratory

COMM: (315) 330-4822 DSN: 587-4822

NIPR: <u>Danielle.Gambino@us.af.mil</u>

JWICs: <u>Danielle.Gambino@rome.ic.gov</u>

<Distribution Statements.png>

From: Antonakakis, Manos <manos@gatech.edu> Sent on: Monday, June 4, 2018 2:27:35 PM To: Smith, Jonathan <jonathan.smith@darpa.mil> CC: Kintis, Panagiotis <kintis@gatech.edu>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: DARPA Riser Selection

Ok, let meet in my office then at 15.30. Pano, send invites all around.

Thanks,

Typos due to mobile device ...

> On Jun 4, 2018, at 09:24, Smith, Jonathan <jonathan.smith@darpa.mil> wrote:

>

> Manos:

> Of course; before dinner.

> -JMS

>

>

> On 6/4/18, 9:09 AM, "Antonakakis, Manos" <manos@gatech.edu> wrote:

>

> JMS, Thursday we will have the AFOSI folks from San Antonio in the lab all day. They want a deeper dive into the analysis we will present in the PI meeting on Friday. Chris and Tejas will be there as well.

>

> If we going to make this Thursday, it has to be late afternoon (around 15.00 or later).

>

- > Thanks,
- >
- > —
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- > >
- > From: Smith, Jonathan <jonathan.smith@darpa.mil>
- > Sent: Monday, June 4, 2018 9:06:39 AM

> To: Kintis, Panagiotis; Antonakakis, Manos

> Cc: Keromytis, Angelos; Schneck, Christopher (contr-i2o)

> Subject: Re: DARPA Riser Selection

>

> Do you have time on Thu. afternoon?

> -JMS

- >
- >
- > From: "Kintis, Panagiotis" <kintis@gatech.edu>
- > Date: Friday, June 1, 2018 at 4:10 PM
- > To: "Antonakakis, Manos" <manos@gatech.edu>

> Cc: "Kintis, Panagiotis" <kintis@gatech.edu>, Jonathan Smith <jonathan.smith@darpa.mil>, Angelos Keromytis <angelos.keromytis@darpa.mil>, Christopher Schneck <christopher.schneck.ctr@darpa.mil>

> Subject: Re: DARPA Riser Selection

>

> I am truly honored to participate in the Symposium as a DARPA Riser. JMS, thank you so much for the nomination and

your help! I really appreciate the opportunity to talk about our work to the rest of the community!

- >
- > I am available any time next week to discuss about next steps.
- >
- > Thank you,
- >
- > Panagiotis (Panos), Kintis.
- > hxxxp://about.me/kintis
- > kintis@gatech.edu<mailto:kintis@gatech.edu>
- > panagiotious@gmail.com < mailto:panagiotious@gmail.com >
- > P Think before you print!
- >
- >

> On Jun 1, 2018, at 15:53, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

>

> Pano, you should thank JMS for this.

>

> Next week, JMS will be in town alongside Angelo and Chris. We should discuss what would be in the best interest of the program for you to present in D60.

>

- > Thanks,
- > >
- > Manos Antonakakis | manos@gatech.edu<mailto:manos@gatech.edu>
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- >
- > From: Kintis, Panagiotis
- > Sent: Friday, June 1, 2018 3:37:44 PM
- > To: Antonakakis, Manos
- > Subject: Fwd: DARPA Riser Selection
- >

> Received the invite for the Symposium! Need to prepare for a presentation now. We should probably talk about this after Friday!

>

- > Panagiotis (Panos), Kintis.
- > hxxxp://about.me/kintis
- > kintis@gatech.edu<mailto:kintis@gatech.edu>
- > panagiotious@gmail.com < mailto:panagiotious@gmail.com >
- > P Think before you print!
- >
- > Begin forwarded message:
- >
- > From: DARPA60 <DARPA60@darpa.mil<mailto:DARPA60@darpa.mil>>
- > Subject: DARPA Riser Selection
- > Date: June 1, 2018 at 15:16:44 EDT
- > To: "'panagiotious@gmail.com<mailto:panagiotious@gmail.com>'"

<panagiotious@gmail.com<mailto:panagiotious@gmail.com>>, "'kintis@gatech.edu<mailto:kintis@gatech.edu>'" <kintis@gatech.edu<mailto:kintis@gatech.edu>>

- > Cc: "Smith, Jonathan" <jonathan.smith@darpa.mil<mailto:jonathan.smith@darpa.mil>>, "Wilkerson, Kiely (contr-i2o)"
- <Christine.Wilkerson.ctr@darpa.mil<mailto:Christine.Wilkerson.ctr@darpa.mil>>, "Veney, Charlene (contr-i2o)"
- <Charlene.Veney.ctr@darpa.mil<mailto:Charlene.Veney.ctr@darpa.mil>>, DARPA60
- <DARPA60@darpa.mil<mailto:DARPA60@darpa.mil>>, "Higgins, Stacey (contr-fld)"
- <stacey.higgins.ctr@darpa.mil<mailto:stacey.higgins.ctr@darpa.mil>>

> Dear Mr. Kintis,

>

> Congratulations! The Defense Advanced Research Projects Agency (DARPA) has selected you to participate in the D60, the Agency's 60th Anniversary Symposium, as a DARPA Riser. The events take place September 5-7, 2018, at the Gaylord National in National Harbor, Maryland.

>

> Please see attached for an official selection letter from Dr. Steven H. Walker, DARPA Director.

>

> Confirmation of your participation is required no later than June 15, 2018. Please email your response to darpa60@darpa.mil<>.

>

- > We look forward to working with you!
- > Best regards,
- > D60 Planning Team
- >
- >
- >
- >
- >

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, November 29, 2018 12:43:55 AM To: Newman, Randyll E - GOV <randyll.e.newman@NCIS.NAVY.MIL>; Farrell, Michael D <Michael.Farrell@gtri.gatech.edu> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: Data source

Hey Randyll, very please to meet you today. As we talked about, let's coordinate with Michael and get you and you team visiting Georgia Tech.

Chris/Angelos, this is just an FYI-. If we want to be part of this meeting, we would be happy to include you.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Newman, Randyll E - GOV <randyll.e.newman@NCIS.NAVY.MIL> Sent: Wednesday, November 28, 2018 9:47:55 AM To: Antonakakis, Manos Subject: Data source

Manos

It was nice to meet you. I would like to come down to GTRI and see what you have to offer and to present our needs to you.

Tejas Patel advised GTRI has a data source he was using. Can we get access this data source?

Randyll Newman Deputy Assistant Director NCIS Cyber Capabilities Integration (571) 305-9904 From: Rodney Joffe <rodney.joffe@team.neustar> Sent on: Friday, February 12, 2021 5:17:55 PM To: Manos Antonakakis <manos@gatech.edu> CC: Mitchell, Michael F <michael.mitchell@ece.gatech.edu> Subject: Re: Data subscription extension

We're on it.

> On Feb 12, 2021, at 11:51 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> OK, let start asap. I cannot go back to DARPA and say that I cannot do this because GT is not moving fast enough. I will lose face.

>

> Manos

- >
- > From: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>
- > Date: Friday, February 12, 2021 at 11:31 AM
- > To: Antonakakis, Manos <manos@gatech.edu>, Rodney Joffe <rodney.joffe@team.neustar>
- > Subject: RE: Data subscription extension
- >
- > Manos,
- >

> It really depends on how quickly the subsidiary is able to get registered in the system (outside of our control), send us the quote, and how responsive they are to the inquiries and requests for documentation that procurement needs. I would say probably 3 weeks on the short side accounting for some back and forth between supplier and contracting officer.

- >
- > Rodney,
- >

> Would you please have the new company register as a vendor in our system. No action on our part can be completed until we have the quote and the new company's registration is done. This link will allow for a new account to be set up, including routing details for payments on future invoices. A new PO will be issued.

> >

https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwd5.myworkdaysite.com%2Fsupplier%2Fgatech%2FS >

- > Let me know if you have questions!
- >
- > M
- >
- >
- > From: Antonakakis, Manos <manos@gatech.edu>
- > Sent: Friday, February 12, 2021 9:29 AM
- > To: Rodney Joffe <rodney.joffe@team.neustar>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu>
- > Subject: Re: Data subscription extension
- >
- > Rodney this makes sense.
- >
- > Michael, can I get an ETA on this being one?
- >
- > Thanks, Manos
- >
- > From: Rodney Joffe <rodney.joffe@team.neustar>
- > Date: Thursday, February 11, 2021 at 9:39 PM
- > To: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>

From: Rodney Joffe <rodney.joffe@team.neustar> Sent on: Wednesday, April 14, 2021 7:42:47 PM To: Mitchell, Michael F <michael.mitchell@ece.gatech.edu> CC: Manos Antonakakis <manos@gatech.edu>; Colin Monaghan <colin.monaghan@team.neustar> Subject: Re: Data subscription extension Hello Michael, Many thanks. Putting it into process now. Regards Rodney > On Apr 14, 2021, at 2:31 PM, Mitchell, Michael F <michael.mitchell@ece.gatech.edu> wrote: > > Hey Rodney, > > I was following up on the requisition that I put in for this and found that the PO was executed for this. The PO number is PO-5145022. If you have not yet done so, would you please send an invoice for this PO to apinvoices@gatech.edu with a subject line of PO-5145022? > > Let me know if you have any questions or need help on this. > > Thanks! > > Michael > > -----Original Message-----> From: Rodney Joffe <rodney.joffe@team.neustar> > Sent: Friday, February 12, 2021 2:57 PM > To: Antonakakis, Manos <manos@gatech.edu> > Cc: Mitchell, Michael F <michael.mitchell@ece.gatech.edu> > Subject: Re: Data subscription extension > > Hi Manos and Michael, > > We think we have accurately completed the registration form. Please let me know if there is anything else needed. > > Thanks! > Rodney > > >> On Feb 12, 2021, at 11:51 AM, Antonakakis, Manos <manos@gatech.edu> wrote: >> >> OK, let start asap. I cannot go back to DARPA and say that I cannot do this because GT is not moving fast enough. I will lose face. >> >> >> >> Manos >> >> >> >> From: Mitchell, Michael F <michael.mitchell@ece.gatech.edu> >> Date: Friday, February 12, 2021 at 11:31 AM

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, January 31, 2018 8:53:56 PM To: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Dates and IPs

Will do tonight. Catching up with many things today.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Sent: Wednesday, January 31, 2018 3:13:05 PM To: Antonakakis, Manos Cc: Keromytis, Angelos Subject: Dates and IPs

Manos,

Have you had a chance to look at the sheet Angelos gave you on a Monday?

Regards, Tejas

Sent from my iPhone

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, February 2, 2018 12:52:13 AM To: Antonakakis, Manos <manos@gatech.edu> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, February 2, 2018 12:52:12 AM Subject: Re: Dates and IPs Attachments: Nameless.txt (1.84 KB)

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, February 27, 2018 12:31:51 AM

To: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Denz, Mary (contr-i2o) <mary.denz.ctr@darpa.mil>; Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil>; Beltz, Steven <steven.beltz@darpa.mil> Subject: Re: Dispar

Subject: Re: Dinner

Folks, it will take me roughly 20 minutes to drive up the 5th street during that time of the day. May I trouble you with a .5M (or 10 minutes) walk between Renaissance and Klaus Advance Computing building?

https://maps.google.com/?q=118a+Ferst+Dr+NW&entry=gmail&source=g

I will be waiting you downstairs and will drive you to and from the restaurant. The 5th street is notoriously bad that time of the day.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

Sent: Monday, February 26, 2018 1:19 PM

To: Keromytis, Angelos; Denz, Mary (contr-i2o); Maddern, Thomas (contr-i2o); Beltz, Steven; Antonakakis, Manos Subject: Dinner

When: Thursday, March 1, 2018 6:30 PM-8:30 PM.

Where: Kyma, 3085 Piedmont Rd NE, Atlanta, GA 30305

Reservations are for 1830.

Manos and Angelos to coordinate transportation to/from hotel (Renaissance, 866 W Peachtree St NW, Atlanta, GA 30308) to Kyma (3085 Piedmont Rd NE, Atlanta, GA 30305).

Angelos, Mary, and Tom will be together. Tejas will be arriving separate. Steve has not booked tickets yet and is a maybe.

From: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, February 27, 2018 1:11:38 AM To: Antonakakis, Manos <manos@gatech.edu> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>; Denz, Mary (contr-i2o) <mary.denz.ctr@darpa.mil>; Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil>; Beltz, Steven <steven.beltz@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, February 27, 2018 1:11:37 AM Subject: Re: Dinner Attachments: Nameless.txt (1.39 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, April 6, 2018 4:51:51 PM To: Smith, Jonathan <jonathan.smith@darpa.mil> CC: Everett, John <john.everett@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Discussion follow up and information sharing

Here you go, JMS.

campus2-rtr (cisco WS-C6509-V-E) -> BCDC1-rtr (cisco WS-C6509-V-E) -> bcdc-nexus-K29-UP-A (cisco Nexus 5596 Chassis with FEXs)

campus2-rtr#sh ver Cisco IOS Software, s2t54 Software (s2t54-ADVIPSERVICESK9-M), Version 15.1(2)SY6, RELEASE SOFTWARE (fc4) Technical Support: <u>http://www.cisco.com/techsupport</u> Copyright (c) 1986-2015 by Cisco Systems, Inc. Compiled Thu 10-Sep-15 01:36 by prod_rel_team

ROM: System Bootstrap, Version 12.2(50r)SYS2, RELEASE SOFTWARE (fc1)

campus2-rtr uptime is 1 year, 35 weeks, 3 days, 21 hours, 19 minutes Uptime for this control processor is 1 year, 28 weeks, 13 hours, 45 minutes System returned to ROM by Stateful Switchover System restarted at 20:29:54 EDT Sat Sep 17 2016 System image file is "bootdisk:s2t54-advipservicesk9-mz.SPA.151-2.SY6.bin" Last reload reason: power-on

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <u>http://www.cisco.com/wwl/export/crypto/tool/stqrg.html</u>

If you require further assistance please contact us by sending email to export@cisco.com.

cisco WS-C6509-V-E (M8572) processor (revision) with 1785856K/262144K bytes of memory. Processor board ID FOX1418GY6U CPU: MPC8572_E, Version: 2.2, (0x80E80022) CORE: E500, Version: 3.0, (0x80210030) CPU:1500MHz, CCB:600MHz, DDR:600MHz L1: D-cache 32 kB enabled I-cache 32 kB enabled

Last reset from power-on 57 Virtual Ethernet interfaces bcdc-nexus-K29-UP-A#

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Smith, Jonathan <jonathan.smith@darpa.mil> Sent: Friday, April 6, 2018 11:47:19 AM To: Antonakakis, Manos Cc: Everett, John; Keromytis, Angelos Subject: Re: Discussion follow up and information sharing

Manos: Is it possible to get us the software/firmware versions running on the routers? Thanks, -JMS

On 4/6/18, 7:44 AM, "Antonakakis, Manos" <manos@gatech.edu> wrote:

cisco Nexus 5596 Chassis with FEXs

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, April 6, 2018 7:55:35 AM To: Antonakakis, Manos <manos@gatech.edu> CC: Everett, John <john.everett@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, April 6, 2018 7:45:55 AM Subject: Re: Discussion follow up and information sharing Attachments: Nameless.txt (1.39 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, June 14, 2018 7:09:50 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, June 14, 2018 7:09:47 PM Subject: Re: DNS Data Availability Attachments: Nameless.txt (3.63 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, November 17, 2017 7:39:54 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: Re: DoD Employee looking for contact info (Cyber Attribution Team)

ack

— Manos Antonakakis

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Friday, November 17, 2017 2:25:14 PM To: Antonakakis, Manos; Patel, Tejas (contr-i2o) Subject: RE: DoD Employee looking for contact info (Cyber Attribution Team)

Ignore the fact she's at NPS or the Navy. Respond as you would to anyone else. -Angelos

-----Original Message-----

From: Antonakakis, Manos [<u>mailto:manos@gatech.edu</u>] Sent: Friday, November 17, 2017 2:07 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: Fwd: DoD Employee looking for contact info (Cyber Attribution Team)

How should I handle this?

Typos due to mobile device ...

Begin forwarded message:

From: "Keen, Kayla (CIV)" <knkeen@nps.edu <<u>mailto:knkeen@nps.edu</u>> >

Date: November 17, 2017 at 12:42:16 EST

To: "manos@gatech.edu <<u>mailto:manos@gatech.edu</u>> " <manos@gatech.edu <<u>mailto:manos@gatech.edu</u>> > Subject: RE: DoD Employee looking for contact info (Cyber Attribution Team)

Professor Antonakakis,

My name is Kayla Keen. I am a DoD civilian employee, currently pursuing my PhD in Computer Science at the Naval Postgraduate School (NPS). I am trying to narrow down a topic for my dissertation research and am particularly interested in attribution information gained from binaries. I found your research in my deep dive, and was interested in learning more. Please let me know if you are interested in collaborating; I would be happy to set up a short meeting.

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, September 6, 2017 1:19:30 AM To: Aaron, David (NSD) <David.Aaron2@usdoj.gov>; CC: Myers, Zachary (USAMD) <Zachary.Myers@usdoj.gov>; Mitchell, Nicolas (USAMD) <Nicolas.Mitchell@usdoj.gov>; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: DOJ contact - Case #2

Hey David, very pleased to meet you Sir.

Dave Dagon (CCed) and I are working on a full report for you. We expect to have this ready by the 15th, however, this depends on both the load at the Georgia Tech cluster and the findings as more analysis comes to us from the Attribution Framework.

Please stay tuned --- we will pass information to you asap.

BTW, can you guys use PGP at all?

Cheers,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Aaron, David (NSD) <David.Aaron2@usdoj.gov> Sent: Tuesday, September 5, 2017 6:22:32 PM To: Antonakakis, Manos Cc: Myers, Zachary (USAMD); Mitchell, Nicolas (USAMD); Keromytis, Angelos Subject: DOJ contact - Case #2

Manos,

Angelos passed along your email address. I'm his contact at DOJ for Case #2. I wanted to introduce myself in case we have additional information or follow-up questions. I've copied my colleagues, Zach Myers and Nick Mitchell.

Thank you very much for your work on this.

-David

David Aaron U.S. Department of Justice (202) 307-5190 From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, September 6, 2017 12:38:49 AM To: Aaron, David (NSD) <David.Aaron2@usdoj.gov> CC: Antonakakis, Manos <manos@gatech.edu>; Myers, Zachary (USAMD) <Zachary.Myers@usdoj.gov>; Mitchell, Nicolas (USAMD) <Nicolas.Mitchell@usdoj.gov> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, September 6, 2017 12:38:44 AM Subject: Re: DOJ contact - Case #2 Attachments: Nameless.txt (1.59 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Saturday, March 31, 2018 10:57:51 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Domains used in a spear-phish

Give me a call when you see this.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Saturday, March 31, 2018 11:43:52 AM To: Antonakakis, Manos Subject: Re: Domains used in a spear-phish

Lowest priority. Wait until after the paper.

Dr Angelos D. Keromytis Program Manager, Information Innovation Office (I2O) DARPA 675 N. Randolph Street Arlington, VA 22203

(T) 571-218-4290

Angelos.Keromytis@darpa.mil<mailto:Angelos.Keromytis@darpa.mil> (NIPR) Angelos.Keromytis@darpa.smil.mil<mailto:Angelos.Keromytis@darpa.smil.mil> (SIPR) Angelos.Keromytis@darpa.ic.gov<mailto:Angelos.Keromytis@darpa.ic.gov> (JWICS)

On Mar 31, 2018, at 11:35 AM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

I will take a look at it. Panos is working on a paper.

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>> Sent: Saturday, March 31, 2018 11:31:27 AM To: Antonakakis, Manos Subject: Fwd: Domains used in a spear-phish

Can you ask Pano to take a *quick* look?

Dr Angelos D. Keromytis Program Manager, Information Innovation Office (I2O) DARPA 675 N. Randolph Street Arlington, VA 22203

(T) 571-218-4290

Angelos.Keromytis@darpa.mil<mailto:Angelos.Keromytis@darpa.mil><mailto:Angelos.Keromytis@darpa.mil> (NIPR) Angelos.Keromytis@darpa.smil.mil<mailto:Angelos.Keromytis@darpa.smil.mil><mailto:Angelos.Keromytis@darpa.smil.mil> (SIPR)

Angelos.Keromytis@darpa.ic.gov<mailto:Angelos.Keromytis@darpa.ic.gov><mailto:Angelos.Keromytis@darpa.ic.gov> (JWICS)

Begin forwarded message:

From: "Ha, Henry K. (CYD) (FBI)" <hha@fbi.gov<mailto:hha@fbi.gov><mailto:hha@fbi.gov>> Subject: Domains used in a spear-phish

Date: March 30, 2018 at 10:59:47 AM EDT

To: "angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil><mailto:angelos.keromytis@darpa.mil>" <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil><mailto:angelos.keromytis@darpa.mil>> Cc: "Knapp, Chad A. (OC) (FBI)" <caknapp@fbi.gov<mailto:caknapp@fbi.gov><mailto:caknapp@fbi.gov>>, "Valentine, Dennis N. (ITADD) (FBI)" <dnvalentine@fbi.gov<mailto:dnvalentine@fbi.gov><mailto:dnvalentine@fbi.gov>>

PM Angelos Keromytis,

FYI, I received your contact information from my colleague, SSA Chad Knapp.

I am currently looking into a spear-phish campaign that occurred between February 26, 2018 and March 27, 2018. The emails included links to the following domains: "cloud-conf.org<http://cloud-conf.org><http://cloud-conf.org>" and "zacksmarket.com<http://zacksmarket.com>".

I was wondering if you could check your holdings for information relating to those domains. It would be great to see if there was also activity before and after the date range listed above.

Please let me know if you have any questions. Thank you.

Regards, FBI SSA Henry Ha Desk: 703-633-5644 From:Keromytis, Angelos<angelos.keromytis@darpa.mil>Sent on:Tuesday, January 30, 2018 11:18:23 AMTo:Chen, Tim<tim@domaintools.com>CC:Antonakakis, Manos<manos@gatech.edu>Signed by:KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, January 30, 2018 11:18:22 AMSubject:Re: DomainTools POCAttachments: Nameless.txt (752 Bytes)

Tim, nice to meet you too. How's your Wednesday? Best, -Angelos On Jan 26, 2018, at 19:28, Chen, Tim <<u>tim@domaintools.com</u>> wrote:

Thanks Manos.

Hi Angelos,

Very nice to meet you. I will make myself available to you at any time.

Here is my personal cell number: . Otherwise, happy to set up a dedicated time to speak next week.

Tim

On Thu, Jan 25, 2018 at 9:13 PM, Antonakakis, Manos <<u>manos@gatech.edu</u>> wrote: Anegle, please meet Tim. He is running DomainTools and he can answer all questions you might have around the WHOIS data GT uses for our analysis and modeling.

Tim, Angelos is our Program Manager from DARPA. You can trust him fully.

Thanks, Manos

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Sunday, January 28, 2018 12:49:42 PM To: Smith, Jonathan <jonathan.smith@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: EA Site Visit: GTRC

Gentlemen, the time for this invite is Mon 1/29/2018 12:00a - 4:00a. That is tomorrow, which is not possible. The EA site visit was set up by Tejas to be on Friday 02/03, between 13.00 and 17.00 (after Alenka's review).

Am I missing something here or this is just a mistake?

Many thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Smith, Jonathan <jonathan.smith@darpa.mil>

Sent: Sunday, January 28, 2018 6:09:11 AM

To: Beltz, Steven; Danielle Gambino (danielle.gambino@us.af.mil); Denz, Mary (contr-i2o); Keromytis, Angelos; Maddern,

Thomas (contr-i2o); Antonakakis, Manos

Subject: EA Site Visit: GTRC

When: Monday, January 29, 2018 12:00 AM-4:00 AM.

Where: Klaus Advanced Computing Building, Ferst Dr NW, Atlanta, GA 30313

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Sunday, January 28, 2018 4:45:33 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Sunday, January 28, 2018 4:45:32 PM Subject: Re: EA Site Visit: GTRC Attachments: Nameless.txt (1.04 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Saturday, April 21, 2018 3:48:04 PM

To: Gregory Neal Akers (gakers) <gakers@cisco.com>; Smith, Jonathan <jonathan.smith@darpa.mil> CC: Kim Deane (kdeane) <kdeane@cisco.com>; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: E-introduction

Status update, Gentlemen.

JMS, talked with Greg and Jared (leader of the forensic team our of Knoxville) this morning. We have a game-plan in mind, and we will update you as discoveries being made.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Wednesday, April 18, 2018 8:44:47 PM To: Gregory Neal Akers (gakers); Smith, Jonathan Cc: Kim Deane (kdeane); Keromytis, Angelos Subject: Re: E-introduction

Hey Greg, pleased to meet you, Sir. My mobile is

Feel free to call me anytime you want. Regarding tomorrow; I am extracting my wisdom teeth in the morning, so it might take some time before I can speak over the phone (and you can understand me over both my accent and swelling). We can try, but I cannot promise that I will be able to talk with enough clarity. :)

It is likely that Friday I will be in better condition to talk over the phone. If you have an open slot sometime throughout the day, perhaps we get on a call then?

My plan is to share all technical details around this phenomenon (per JMS's note) over the phone.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Gregory Neal Akers (gakers) <gakers@cisco.com> Sent: Wednesday, April 18, 2018 8:06:16 PM To: Smith, Jonathan Cc: Antonakakis, Manos; Kim Deane (kdeane); Keromytis, Angelos Subject: Re: E-introduction

Thank you Jonathan !

Manos,

It is a great pleasure to meet you. I am traveling tomorrow most of the day. Is there a number I could try to reach you on when I am in a position to speak ?

-g

Sent from my iPhone And you already know I can't type!

> On Apr 18, 2018, at 7:52 PM, Smith, Jonathan <jonathan.smith@darpa.mil> wrote:

- >
- > Dear Greg,
- > Manos Antonakakis is a Professor at GA Tech, and PI of an
- > effort under my colleague Angelos Keromytis' EA program.
- > Manos has unparalleled visibility into DNS traffic and uncovered
- > the situation we discussed today at 11. I just got off the
- > phone with him and outlined your capabilities and passed
- > on your cautionary information. He proposed a strategy that
- > makes sense in terms of maintaining observability while
- > being able to experiment. I will let him share this with you.
- >
- > Dear Manos,
- > Greg Akers is a Senior VP at Cisco and expert in your current
- > domain of concern. He is aware of the situation and knows
- > how to get the information you need without disturbing your
- > operations. Please share your concerns, plan and any info
- > Greg or his team requests.
- >
- > Best,
- > -JMS
- >
- > Jonathan M. Smith
- > Jonathan.Smith@darpa.mil
- > T: 703.526.4176; C: 571.481.7228
- >
- >

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, March 28, 2018 1:12:43 PM To: Antonakakis, Manos <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, March 28, 2018 1:12:43 PM Subject: Re: ESET Attachments: Nameless.txt (1020 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, October 30, 2018 7:46:07 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Tejas Patel <tejas@kududyn.com> Subject: Re: Everything that is wrong with our community

I watched about half of it, and didn't see anything particularly wrong or interesting. What got you riled up?

> On Oct 30, 2018, at 13:29, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> hxxxps://xxx.youtube.com/watch?v=YGJaj6_3dGA

>

> These people are building and most importantly verifying detectors in the field.

>

> Key takeaway from this presentation: If you do not know how to do detection, redefine it (to what you think detection should be).

>

- > —
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, April 26, 2018 2:03:59 PM To: Angelos D. Keromytis

CC: Fabian Monrose <fabian@cs.unc.edu> Subject: Re: External letter writters

Do not know Sam. Sal does not make much sense since Steve and you will be writing a letter. Sotiris does not count because he is international (they want only US based!?!?!). Wenke is not allowed to be in this list. Gabriela is too junior, I think. I will double check.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Angelos D. Keromytis Sent: Wednesday, April 25, 2018 6:27 PM To: Antonakakis, Manos Cc: Fabian Monrose Subject: Re: External letter writters

Do you know Sam King? He's now at UC Davis.

Sal? But that would another one from Columbia.

Sotiris? For the international flavor :)

Isn't Wenke writing you a letter? It's pretty customary to ask the advisor.

Virgil would be good.

Gabriela Cretu (SRI)?

-Angelos

> On Apr 25, 2018, at 18:15, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Gents, it appears that I cannot use Fabian because we wrote a paper together and it is too recent for taste of the committee. I am trying to get an exception but this is likely to be made.

>

> Any ideas of someone else that could write a letter for me? My current list (all have confirmed via email that are willing to write a letter) is:

>

- > +: IEEE and/or ACM Fellow
- > *: Full Professor
- > -: Industry
- > \$: National Academy of Engineering

>

> 1. Angelos Keromytis (DARPA) + <u>http://www.cs.columbia.edu/~angelos/</u>

- > 2. Steve Bellovin (Columbia) *+\$ <u>https://www.cs.columbia.edu/~smb/</u>
- > 3. Patrick McDaniel (Penn State) *+ <u>http://www.patrickmcdaniel.org/</u>
- > 4. Farnam Jahanian (CMU President) *+ <u>https://www.cs.cmu.edu/~farnam/</u>

- > 5. Giovanni Vigna *+ (UCSB) https://www.cs.ucsb.edu/~vigna/
- > 6. Jonathan Smith *+ (UPenn) <u>https://www.cis.upenn.edu/~jms/</u>
- > 7. Nick Feamster (Princeton) *+ <u>https://www.cs.princeton.edu/~feamster/</u>
- > 8. Gunter Ollmann (Microsoft. CTO, Security (Cloud and Enterprise)) -
- > 9. Engin Kirda (NorthEastern) * http://www.ccs.neu.edu/home/ek/

>

> Should I ask someone else from DARPA, or Virgil, or Vern (not sure if he even reply), or Avi (not sure if he will write a good one after what happened with JHU offer --- Fabian disagrees with me on this one) or someone else?

- > Yes, they need 10 from me ...
- >
- > —
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >

From: Angelos D. Keromytis

Sent on: Tuesday, May 29, 2018 6:22:50 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Fabian Monrose <fabian@cs.unc.edu> Subject: Re: External letter writters

No problem. Looks like a good list.

> On May 29, 2018, at 10:00, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Gents, I was just informed that Fabian could be considered as a writer, but not Angelos (cannot considered as DARPA anymore).

- >
- > My ten are:
- >
- > +: IEEE and/or ACM Fellow
- > *: Full Professor
- > -: Industry
- > \$: National Academy of Engineering

>

- > 1. Fabian Monrose (UNC) * https://www.cs.unc.edu/~fabian/web.html
- > 2. Patrick McDaniel (Penn State) *+ http://www.patrickmcdaniel.org/
- > 3. Farnam Jahanian (CMU President) *+ <u>https://www.cs.cmu.edu/~farnam/</u>
- > 4. Giovanni Vigna *+ (UCSB) <u>https://www.cs.ucsb.edu/~vigna/</u>
- > 5. Nick Feamster (Princeton) *+ <u>https://www.cs.princeton.edu/~feamster/</u>
- > 6. Jonathan Smith *+ (UPenn) <u>https://www.cis.upenn.edu/~jms/</u>
- > 7. Steve Bellovin (Columbia) *+\$ <u>https://www.cs.columbia.edu/~smb/</u>
- > 8. Gunter Ollmann, Microsoft. CTO, Security (Cloud and Enterprise)
- > 9. Engin Kirda (NorthEastern) * <u>http://www.ccs.neu.edu/home/ek/</u>
- > 10. Jason Livingood (Comcast), VP of Tech Policy & Standards, <u>https://www.youtube.com/watch?v=01HPk_vYWAw</u>, <u>https://corporate.comcast.com/comcast-voices/internet-society-adds-jason-livingood-to-board-of-trustees</u>

>

> Angele, I would have you as the guy that puts pressure on Steve. They were *really* impressed that Steve will write me a letter. They only see people from the National Academy of Engineering to write letters for Full Professor cases.

- > > Any objections/suggestions?
- >
- > Thanks for all your help!
- >
- > -
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- >

- > Sent: Thursday, April 26, 2018 9:19:43 AM
- > To: Antonakakis, Manos
- > Cc: Angelos D. Keromytis
- > Subject: Re: External letter writters
- >
- > Fine by me.
- >

> From your list, Virgil is also good, though he may not be able to as easily grasp the broader impact of your work when

> From: Fabian Monrose <fabian@cs.unc.edu>

>>>> +: IEEE and/or ACM Fellow >>>> *: Full Professor >>> -: Industry >>>> \$: National Academy of Engineering >>>> >>>> 1. Angelos Keromytis (DARPA) + http://www.cs.columbia.edu/~angelos/ >>>> 2. Steve Bellovin (Columbia) *+\$ <u>https://www.cs.columbia.edu/~smb/</u> >>> 3. Patrick McDaniel (Penn State) *+ http://www.patrickmcdaniel.org/ >>>> 4. Farnam Jahanian (CMU President) *+ https://www.cs.cmu.edu/~farnam/ >>>> 5. Giovanni Vigna *+ (UCSB) <u>https://www.cs.ucsb.edu/~vigna/</u> >>>> 6. Jonathan Smith *+ (UPenn) https://www.cis.upenn.edu/~jms/ >>>> 7. Nick Feamster (Princeton) *+ https://www.cs.princeton.edu/~feamster/ >>>> 8. Gunter Ollmann (Microsoft. CTO, Security (Cloud and Enterprise)) ->>>> 9. Engin Kirda (NorthEastern) * http://www.ccs.neu.edu/home/ek/ >>>> >>>> Should I ask someone else from DARPA, or Virgil, or Vern (not sure if he even reply), or Avi (not sure if he will write a good one after what happened with JHU offer --- Fabian disagrees with me on this one) or someone else? >>>> >>>> Yes, they need 10 from me ... >>>> >>>> — >>>> Manos Antonakakis | manos@gatech.edu >>>> Georgia Institute of Technology >>>> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 >>>>

>>>

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, November 30, 2018 4:43:56 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> CC: Smith, Jonathan <jonathan.smith@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Final slide deck for PI meeting

This message did not go through (due to the size of the attachment). Chris now has the slides. Please work with him to get them.

Thanks,

_

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Friday, November 30, 2018 10:49:11 AM To: Schneck, Christopher (contr-i2o) Cc: Smith, Jonathan; Keromytis, Angelos Subject: Final slide deck for PI meeting

Attached, same password.

Had a great discussion with Dr. Pierce earlier today. We are on the same page about everything.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, June 12, 2018 1:26:57 AM

To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil>

CC: POOLE, DAVID E SA USAF AFOSI AFOSI/XRC <david.poole@us.af.mil>; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY <stephynie.velez@us.af.mil>; GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil> Subject: Re: Follow-up from Meetings Last Week

Jason, you and your team is always welcome at GT and my lab. Really looking forward to the next steps with AFOSI, so we can figure out how we can help your team both short but also long term.

In the meantime, please let me know if there is anything you need from my side.

Many thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil> Sent: Monday, June 11, 2018 5:05:43 PM To: Keromytis, Angelos; Antonakakis, Manos; Schneck, Christopher (contr-i2o); Smith, Jonathan CC: POOLE, DAVID E SA USAF AFOSI AFOSI/XRC; VELEZ, STEPHYNIE E SA USAF AFOSI AFOSI/XRCY; GEE, TYSON L SA USAF AFOSI AFOSI/XRC

Subject: Follow-up from Meetings Last Week

Gents,

Thanks again, very much for your unbelievable hospitality last week! We appreciate you hosting us at GA-Tech on Thursday and offering such great insight on the threat. We really enjoyed the discussions and are energized to move forward.

I have engaged our tactical elements to cultivate some 'interesting' data for your research. Once I have it, I will forward it through Chris with Angelos CC'ed. Please let me know if I need to include more officials on the Govt/DARPA side.

I would also like to continue discussions regarding further investment so let's keep that in mind as we move forward with this initial information-exchange.

Thanks again! We look forward to next meetings!

Thanks & Regards,

Jason D. Stambaugh, SA, USAF Deputy PM for Cyber Training AFOSI Cyber Investigations & Ops

Comm: (571) 305-8850

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, January 10, 2018 10:08:57 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: Re: For the upcoming visit

Yes, I will sync with him.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Wednesday, January 10, 2018 5:07:36 PM To: Antonakakis, Manos Cc: Patel, Tejas (contr-i2o) Subject: Re: For the upcoming visit

GTRI...I think Michael and Scott have worked this out, at least based on what I've seen (earlier today)? Maybe you should check with Michael?

Dr Angelos D. Keromytis Program Manager, Information Innovation Office (I2O) DARPA 675 N. Randolph Street Arlington, VA 22203

(T) 571-218-4290

Angelos.Keromytis@darpa.mil<mailto:Angelos.Keromytis@darpa.mil> (NIPR) Angelos.Keromytis@darpa.smil.mil<mailto:Angelos.Keromytis@darpa.smil.mil> (SIPR) Angelos.Keromytis@darpa.ic.gov<mailto:Angelos.Keromytis@darpa.ic.gov> (JWICS)

On Jan 10, 2018, at 5:06 PM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

Do I need to get a room by GTRI or GT? If you need to enter classified space, GTRI should be better. If the entire discussion will be unclassified, then I would rather have this be done in GT so we can showcase what the lab is doing as well.

What do you think?

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 Thanks!

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Friday, March 9, 2018 8:27:18 AM To: Antonakakis, Manos Cc: Tejas Patel Subject: Re: Fully Funded - Prospective PhD CS Applicant (UNCLASSIFIED)

Not off the top of my head.

> On Mar 9, 2018, at 7:14 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

- > Does the name ring any bells?
- >
- > —
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- > >
- > From: Wenke Lee
- > Sent: Thursday, March 8, 2018 10:17 PM
- > To: Fuller, Jonathan D CPT USARMY ISEC (US)
- > Cc: Kim, Taesoo; Antonakakis, Manos; Ndongi, Elizabeth N; Saltaformaggio, Brendan D
- > Subject: Re: Fully Funded Prospective PhD CS Applicant (UNCLASSIFIED)
- >
- > Hi Jonathan,

>

> Thank you for your interests in Georgia Tech! I'd be happy to talk to you, and Elizabeth can help schedule for us. I also suggest you to talk to Prof. Kim, Prof. Antonakakis, and Prof. Saltaformaggio (cc'd here). Thanks.

- >
- > Wenke
- >

> On Thu, Mar 8, 2018 at 10:50 AM, Fuller, Jonathan D CPT USARMY ISEC (US)

 $\label{eq:constraint} $$ < jonathan.d.fuller.mil@mail.mil< mailto:jonathan.d.fuller.mil@mail.mil>> wrote: \\$

- >
- > CLASSIFICATION: UNCLASSIFIED
- >
- >
- >
- > Professor Lee,

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, March 9, 2018 1:27:18 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Tejas Patel Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, March 9, 2018 1:27:18 PM Subject: Re: Fully Funded - Prospective PhD CS Applicant (UNCLASSIFIED)

Attachments: Nameless.txt (2.37 KB)

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, April 24, 2018 4:59:21 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Tejas Patel <tejas@kududyn.com> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, April 24, 2018 4:59:20 PM Subject: Re: fyi Attachments: Nameless.txt (2.43 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, April 24, 2018 4:20:40 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Tejas Patel <tejas@kududyn.com> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, April 24, 2018 4:20:32 PM Subject: Re: fyi Attachments: Nameless.txt (3.54 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, July 17, 2018 11:14:06 PM To: Smith, Jonathan <jonathan.smith@darpa.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: FYI

The things that are coming your way will blow your mind.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Smith, Jonathan <jonathan.smith@darpa.mil> Sent: Tuesday, July 17, 2018 6:08:40 PM To: Antonakakis, Manos Cc: Keromytis, Angelos Subject: FYI

Manos: I just talked with Angelos and concur with his reasoning. -JMS

Jonathan M. Smith, DARPA/I2O T: 703.526.4176, C: 571.481.7228

DARPA's 60th Anniversary Symposium Sept 5 - 7, 2018 - Washington, D.C. Join us to explore DARPA's next 60 years Register now at: https://D60.DARPA.MIL From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, March 14, 2018 3:13:43 PM To: Tejas Patel <tejas@kududyn.com> CC: Antonakakis, Manos <manos@gatech.edu> Subject: Re: fyi

Yes, that's it :)

On Mar 14, 2018, at 9:58 AM, Tejas Patel <tejas@kududyn.com<mailto:tejas@kududyn.com>> wrote:

Angelos,

George wrote a paper on the rich header. Can't find the link but you might want to send this to him.

Regards, Tejas

Get Outlook for iOS<<u>https://aka.ms/o0ukef</u>>

On Wed, Mar 14, 2018 at 9:56 AM -0400, "Keromytis, Angelos" <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>> wrote:

https://securelist.com/the-devils-in-the-rich-header/84348/

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, August 22, 2018 8:44:31 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Smith, Jonathan <jonathan.smith@darpa.mil>; Subject: Re: FYI-

Farrell, Michael D < Michael.Farrell@gtri.gatech.edu>

No worries.

> On Aug 22, 2018, at 12:26 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> hxxxps://xxx.internetgovernance [.] org/wp-content/uploads/WhitePaper-Attribution-Final-PDF.pdf

>

> This appear to be a garbage report out of GT-Policy that mentions in some parts the Rhamnousia project. Neither I, nor the members of my team had any interaction with these clowns and I/we have provided any information about what we do. Whatever they found and wrote about our project was from online materials.

>

> Goes without saying, these are not thoughts, language or opinions that represent our GT team.

>

> This is a heads up.

>

> —

- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

> > From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, May 4, 2018 3:39:05 PM To: Tejas Patel <tejas@kududyn.com> CC: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; James Nuttall <james@kududyn.com> Subject: Re: Georgia Tech Global Learning Center (GLC)/Hackathon

Absolutely, whatever you guys want to do. I am busy enough, I am happy with one less thing in my queue.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Tejas Patel <tejas@kududyn.com> Sent: Friday, May 4, 2018 10:28:53 AM To: Antonakakis, Manos Cc: Keromytis, Angelos D CIV DARPA (US); Smith, Jonathan; Schneck, Christopher (contr-i2o); Farrell, Michael D; James Nuttall Subject: Re: Georgia Tech Global Learning Center (GLC)/Hackathon

Manos:

I'm not thrilled about using your foundation money and there is no way we can organize anything meaningful before the PI meeting anyway. We are still trying to figure out when we can have the hackathon (summer months are difficult) and what topic we want to focus on.

Can we revisit at the PI meeting?

Regards, Tejas

Tejas Patel Principal investigator Kudu Dynamics +1 919-332-3191 (c) tejas@kududyn.com<<u>mailto:tejas@kududyn.com</u>>

On Fri, May 4, 2018 at 9:51 AM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote: Now, with the correct email for Tejas.

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 Cc: Keromytis, Angelos D CIV DARPA (US); Smith, Jonathan; Schneck, Christopher (contr-i2o) Subject: Fw: Georgia Tech Global Learning Center (GLC)/Hackathon

OK, Gents. We did some digging around and we found this great deal inline. \$5100 for room, food, coffee, etc, for 4 days.

This is located adjacent to the GT hotel. So, if you want to host the hackathon the week after the PI meeting, it can be done and it can be done relatively cheaply.

The only problem I have with this is that I have to spend money from my foundation account. As JMS and Aneglos can testify, foundation accounts are kind of priceless. However, if this will help the TA2 transition and the synergy around the entire problem, I would be happy to eat this bill.

Angelos, JMS, Tejas; your thoughts please? We have to move fast so we can secure the place for this event. If we end up with a "yes, lets do it", I will need Chris to work with Michael M. in organizing this (invitations, logistics, etc.).

Thanks,

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Mitchell, Michael F Sent: Friday, May 4, 2018 9:36 AM To: Antonakakis, Manos Subject: FW: Georgia Tech Global Learning Center (GLC)/Hackathon

Hey Manos,

I spoke with our planning and events person for ECE about the Hackathon event per our conversation. She reached out to the Global Learning Center to get an estimate on what they charge for things. They responded fairly quickly with a cost of \$85 per day which includes the room, a buffet lunch, continental breakfast (with 1 Hot item) and a continuous snack/food break service from 7pm to 5 pm which I believe includes self serve coffee, but I will need to verify to be sure.

For 15 people per our meeting it would cost about \$5100. You currently have about 18,000 in the foundation account currently. If this is something you want to do I think this is probably the best/easiest way to do it. Since the week before June 9th seems to be filling up with activities, I think the week after would be best.

Let me know what you want to do.

Michael

From: Oliva, Joanna Sent: Wednesday, May 2, 2018 6:05 PM To: Mitchell, Michael F <michael.mitchell@ece.gatech.edu<mailto:michael.mitchell@ece.gatech.edu>> Subject: Fw: Georgia Tech Global Learning Center (GLC)/Hackathon

Hey Michael,

Please see the quote below from the GLC! Let me know if you would like to move forward or have any questions.

Joanna Oliva Event Coordinator School of Electrical and Computer Engineering Phone: 404.894.9827 From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, July 11, 2018 3:37:02 PM To: Roberto Perdisci <perdisci@gtisc.gatech.edu> CC: Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Manos Antonakakis <manos@gatech.edu>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Crone, Ian <ian.crone@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, July 11, 2018 3:36:53 PM Subject: Re: Global detection of IoT devices Attachments: Nameless.txt (4.71 KB)

From:Image: Constraint on behalf of Manos Antonakakis <manos@gatech.edu>Sent:Wednesday, August 10, 2016 7:56 AMTo:Roberts, Kristen N; Joffe, RodneySubject:DARPA - EA Sub: Neustar

Hey Kristen,

Please meet Rodney. Rodney, Kristen is my great financial admin.

Kristen, Rodney can help you with all necessary details you might need for OSP.

For Neustar, will have the following yearly breakdown:

Y1: \$1M Y2: \$300K Y3: \$250K Y4: \$250K

Y5: \$125K

The SOW have been structured in such away that will reflect this distribution of funds. One special thing with Neustar is the following. It would be ideal if we can have a PO from them by 30th of September. This is something that we should try very hard to do.

Rodney, please help Kristen with any information she might need from Neustar in order to have you formally in the GT systems as a vendor.

Cheers,

Manos

From:Image: Constant on the second secon

Hey Rodney and Denise,

Hope you are doing great. Kristen and I would like from you the following clarifications.

1. Please provide us a new quote for \$1,925,000, where you clearly state the discount you gave us.

2. Please provide as a working Excel workbook for the pricing proposal. (Attached the template).

If you need any clarification on these (especially on the working Excel workbook), Kristen and I are here to help.

Many thanks,

Manos

From:	on behalf of Manos Antonakakis <manos@gatech.edu></manos@gatech.edu>
Sent:	Saturday, November 19, 2016 9:45 AM
То:	David Dagon; Farrell, Michael D; Beyah, Raheem A; Joffe, Rodney; Fabian Monrose
Subject:	DARPA Team Dinner

Gents,

You (and members of your teams?) will come out to the kick off meeting. Can you please confirm that you (and your team?) will be available for a Monday dinner? I will try to get us a place walking distance from DARPA and the Hilton hotel (where most of us will be staying).

Thanks,

Manos

From:	McConnell, Kirk (Armed Services) <kirk_mcconnell@armed-services.senate.gov></kirk_mcconnell@armed-services.senate.gov>
Sent:	Saturday, June 29, 2019 12:32 AM
То:	Antonakakis, Manos; Rodney Joffe; Joffe Rodney
Subject:	Fwd: connection for briefing on Enhanced Attribution

Well, Michael is quite a guy isn't he?

Sent from my iPhone

Begin forwarded message:

From: "Farrell, Michael" <<u>michael.farrell@iisp.gatech.edu</u>>
Date: June 28, 2019 at 4:41:00 PM EDT
To: "McConnell, Kirk (Armed Services)" <<u>Kirk McConnell@armed-services.senate.gov</u>>
Cc: Ian Crone <<u>ian.crone@darpa.mil</u>>, "<u>lisa.heyes@darpa.mil</u>" <<u>lisa.heyes@darpa.mil</u>>
Subject: Re: connection for briefing on Enhanced Attribution

Kirk,

Thanks for your interest in Georgia Tech research. However, we (GT) have no comment or position on the below. In fact, going forward please contact DARPA directly about any and all issues or questions or comments related to the enhanced attribution program. The DARPA congressional liaison and program manager are copied on this message and can respond, as needed. The Georgia Tech/GTRI PI and Co-PIs on this research program are not the appropriate POCs for any questions, comments, or concerns.

The government, not GT, makes decisions related to funding and transition from research at DARPA to other entities. The focus of Manos, myself and other Co-PIs is completely on doing impactful research. We follow contractual requirements and relevant policies for our part of this program (and GT is only one part), and devote our energy to 'creating the next' in cyber security.

Best,

Michael

On Jun 25, 2019, at 12:24, McConnell, Kirk (Armed Services) <<u>Kirk_McConnell@armed-</u> services.senate.gov> wrote:

FYI. Andy is on the SAC-D staff. Andrew Pahutski from SCO is seeking approval from us on the Hill to shift some SCO money to Enhanced Attribution.

From: McConnell, Kirk (Armed Services)
Sent: Tuesday, June 25, 2019 12:22 PM
To: Heyes, Lisa (lisa.heyes@darpa.mil) <lisa.heyes@darpa.mil>; Vanlandingham, Andy
(Appropriations) <<u>Andy_Vanlandingham@appro.senate.gov</u>>
Subject: connection for briefing on Enhanced Attribution

Lisa –

Andy Vanlandingham is interested in learning more about DARPA's Enhanced Attribution cybersecurity program. It turns out that a current SCO program manager whom we know well is moving over to Cyber Command to help with the transition of this DARPA program to CYBERCOM. Thanks, Kirk

From:	Antonakakis, Manos
Sent:	Monday, November 13, 2017 7:27 AM
То:	Joffe, Rodney; Rodney Joffe
Subject:	Fw: EA PI Meeting: 1 December 2017 (Friday) at the DCC Response needed by COB on 27
-	November 2017
Attachments:	DARPA104.pdf; DARPA60.pdf

Rodney, please note the new registration process you have to go through in order to attend the meeting. Let me know if you want to be there. Cheers,

Manos Antonakakis | manos@gatech.edu
 Georgia Institute of Technology
 FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos Sent: Monday, November 13, 2017 7:25 AM To: fabian@cs.unc.edu; ______; Farrell, Michael D; Demar, Jeremy; perdisci@cs.uga.edu; Ahamad, Mustaque; Blough, Douglas M Subject: Fw: EA PI Meeting: 1 December 2017 (Friday) at the DCC --- Response needed by COB on 27 November 2017

Folks, please see inline -- the registration process has changed. Let me know if you can make this meeting.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil>

Sent: Thursday, November 9, 2017 1:18 PM

To: Maddern, Thomas (contr-i2o); Patel, Tejas (contr-i2o)

Cc: mikef@kududyn.com; Antonakakis, Manos; Robert Wright; Neil Costigan; Scott Tenaglia; Vince Urias; Stephen Schwab; Ben Radford

Subject: EA PI Meeting: 1 December 2017 (Friday) at the DCC --- Response needed by COB on 27 November 2017

All:

The registration process for this PI meeting will be different from previous ones. Rather than going through a registration website, we're requesting that each PI respond to Tom Maddern (thomas.maddern.ctr@darpa.mil) with the names, organizations, and countries of citizenship for each of your team members planning on attending. Please provide this information by COB Monday, November 27th.

Each individual attending will need to bring a completed DARPA Form 104 (attached) along with a government issued ID to the meeting. Non-US citizens will need to submit a DARPA Form 60 (attached) in advance.

Due to a recent DARPA policy change, we are no longer permitted to collect registration fees for covering expenses associated providing with food and beverages at PI meetings. Instead, as shown in the agenda, time will be allowed for lunch and other refreshments to be purchased individually at one of the many local restaurants near DARPA or in the café near the building lobby.

Any questions or concerns you may have about this meeting can be directed to both Tom and myself.

Regards, Tejas Patel Systems Engineering and Technical Assistance DARPA I2O work: +1 571-218-4936 blackberry: +1 571-239-5912 NIPR: tejas.patel.ctr@darpa.mil SIPR: tejas.patel.ctr@darpa.smil.mil JWICS: tejas.patel.ctr@darpa.ic.gov

From:	Antonakakis, Manos
Sent:	Wednesday, November 8, 2017 2:54 PM
То:	Joffe, Rodney
Cc:	Rodney Joffe
Subject:	Fw: Notification HR001117S0051-HACCS-FP-029
Attachments:	Letter 029.pdf

Great news Rodney, we got the official notification that we won HACCS! Please relay the news internally to your team.

Cheers,

_

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: HACCS <haccs@darpa.mil> Sent: Wednesday, November 8, 2017 12:31 PM To: Antonakakis, Manos; Farrell, Michael D Cc: HACCS Subject: Notification HR001117S0051-HACCS-FP-029

Dear Proposer,

Please see the attached file regarding your proposal submission (HR001117S0051-HACCS-FP-029) that was submitted to the Harnessing Autonomy for Countering Cyberadversary Systems (HACCS) solicitation.

Regards,

DARPA/I2O

>>> On Sep 6, 2018, at 10:35 PM, Antonakakis, Manos <manos@gatech.edu> wrote: >>> >>> Venkat, nothing official at the moment. We are in waiting mode. If you want some unofficial news, you can give me a quick call. >>> >>> Thanks, >>> >>> — >>> Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology >>> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 >>> >>> >>> >>> From: Achanta, Venkat <Venkat.Achanta@team.neustar> >>> Sent: Thursday, September 6, 2018 10:30:34 PM >>> To: Antonakakis, Manos >>> Cc: Joffe, Rodney >>> Subject: Touch base >>> >>> Manos, >>> >>> Do you have any other information from DARPA program managers chasing possible path for this fiscal funding ? >>> >>> Thank you. >>> >>> Venkat. >> >

From:	Rodney Joffe <rjoffe@centergate.com></rjoffe@centergate.com>
Sent:	Thursday, September 6, 2018 10:51 PM
То:	Antonakakis, Manos
Subject:	Re: Touch base

DONT TELL HIM ANYTHING DIFFERENT TO ANGELOS After Oct 1 new fiscal year.

> On Sep 6, 2018, at 10:35 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Venkat, nothing official at the moment. We are in waiting mode. If you want some unofficial news, you can give me a quick call.

- >
- > Thanks,
- >
- > —

> Manos Antonakakis | manos@gatech.edu

- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- > >

> From: Achanta, Venkat < Venkat.Achanta@team.neustar>

> Sent: Thursday, September 6, 2018 10:30:34 PM

> To: Antonakakis, Manos

> Cc: Joffe, Rodney

> Subject: Touch base

>

> Manos,

>

> Do you have any other information from DARPA program managers chasing possible path for this fiscal funding ?

>

> Thank you.

>

> Venkat.

From:Antonakakis, ManosSent:Thursday, September 6, 2018 10:53 PMTo:Rodney JoffeSubject:Re: Touch base

I was not planing to, because that is the only hard facts I have.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Rodney Joffe <rjoffe@centergate.com> Sent: Thursday, September 6, 2018 10:50:48 PM To: Antonakakis, Manos Subject: Re: Touch base

DONT TELL HIM ANYTHING DIFFERENT TO ANGELOS After Oct 1 new fiscal year.

> On Sep 6, 2018, at 10:35 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Venkat, nothing official at the moment. We are in waiting mode. If you want some unofficial news, you can give me a quick call.

>

> Thanks,

- >
- > —

> Manos Antonakakis | manos@gatech.edu

- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- > __

> From: Achanta, Venkat < Venkat. Achanta@team.neustar>

> Sent: Thursday, September 6, 2018 10:30:34 PM

- > To: Antonakakis, Manos
- > Cc: Joffe, Rodney
- > Subject: Touch base
- >
- > Manos,
- >

> Thank you.

- >
- > Venkat.

> Do you have any other information from DARPA program managers chasing possible path for this fiscal funding ?

From:	Sinness, Mark B	
Sent:	Thursday, December 15, 2016 4:55 PM	
То:	john.hall@neustar.biz; rodney.joffe@neustar.biz	
Subject:	Neustar Quote for Emmanouil Antonakakis	
Attachments:	WEB FAR 52 Debarment.doc; WEB FAR 52 Lobbying.doc; Sole Source Template Form .doc	

Rodney and John,

Per my phone conversation with Rodney, in order for me to process the PO of the above referenced quote, I will need you to complete some documentation for me. As you may know, DARPA is the funding source for this purchase, so I will need you complete the attached Federal Certifications. Also, pursuant to FAR 52.219-9 I will need you to forward onto me your Small Business Contracting Plan. In addition, I will need you to complete the attached sole source form (I know it doesn't really fit for this purchase, but bear with me) and the price reasonableness documentation requested in the form. Call with any questions.

Thanks for your assistance.

Mark Sinness Procurement Contracting Officer Georgia Institute of Technology 711 Marietta St. Atlanta GA 30332-0300 Phone 404 894 5007 Fax 404 894 8552

From: Sent: To: Cc: Subject:	on behalf of Manos Antonakakis <manos@gatech.edu> Thursday, October 20, 2016 1:11 PM Roberts, Kristen N; Joffe, Rodney Hall, John Re: Checking in on Neustar Contract</manos@gatech.edu>	
John, please talk w	ith Rodney. He gets regular feedback from me.	
Manos		
On Thu, Oct 20, 2016 at 1:09 PM, Roberts, Kristen N <kristen.roberts@ece.gatech.edu> wrote: > Hi John, > ></kristen.roberts@ece.gatech.edu>		
> they are finalizing	received the prime contract from DARPA, and I believe g the "costing" portion. We will send updates once e GT Contracting Officer.	
> > Best, > > Kristen		
> > >		
> > Kristen Roberts >		
> Grants Administra	ator, Sr.	
> Georgia Institute	of Technology	
> School of Electric	al & Computer Engineering	
> > 777 Atlantic Drive >	e, Atlanta, GA 30332-0250	
> Van Leer-Rm W23	36-A	
> Ph: 404.385.6485	i de la construcción de la constru	
	perts@ece.gatech.edu	
> > >		
-	<pre></pre> Control C	

> Sent: Thursday, October 20, 2016 11:07 AM

From:	Rodney Joffe <rjoffe@centergate.com></rjoffe@centergate.com>
Sent:	Saturday, June 29, 2019 12:39 AM
То:	McConnell, Kirk (Armed Services)
Cc:	Antonakakis, Manos
Subject:	Re: connection for briefing on Enhanced Attribution

Jeez

What a piece of work! Glad you don't have any influence with DARPA's budget that Michael relies on.

Manos?

On Jun 29, 2019, at 12:31 AM, McConnell, Kirk (Armed Services) <<u>Kirk_McConnell@armed-services.senate.gov</u>> wrote:

Well, Michael is quite a guy isn't he?

Sent from my iPhone

Begin forwarded message:

From: "Farrell, Michael" <<u>michael.farrell@iisp.gatech.edu</u>> Date: June 28, 2019 at 4:41:00 PM EDT To: "McConnell, Kirk (Armed Services)" <<u>Kirk_McConnell@armed-services.senate.gov</u>> Cc: Ian Crone <<u>ian.crone@darpa.mil</u>>, "<u>lisa.heyes@darpa.mil</u>" <<u>lisa.heyes@darpa.mil</u>> Subject: Re: connection for briefing on Enhanced Attribution

Kirk,

Thanks for your interest in Georgia Tech research. However, we (GT) have no comment or position on the below. In fact, going forward please contact DARPA directly about any and all issues or questions or comments related to the enhanced attribution program. The DARPA congressional liaison and program manager are copied on this message and can respond, as needed. The Georgia Tech/GTRI PI and Co-PIs on this research program are not the appropriate POCs for any questions, comments, or concerns.

The government, not GT, makes decisions related to funding and transition from research at DARPA to other entities. The focus of Manos, myself and other Co-PIs is completely on doing impactful research. We follow contractual requirements and relevant policies for our part of this program (and GT is only one part), and devote our energy to 'creating the next' in cyber security.

Best,

Michael

On Jun 25, 2019, at 12:24, McConnell, Kirk (Armed Services) <<u>Kirk_McConnell@armed-</u> services.senate.gov> wrote: FYI. Andy is on the SAC-D staff. Andrew Pahutski from SCO is seeking approval from us on the Hill to shift some SCO money to Enhanced Attribution.

From: McConnell, Kirk (Armed Services)
Sent: Tuesday, June 25, 2019 12:22 PM
To: Heyes, Lisa (<u>lisa.heyes@darpa.mil</u>) <<u>lisa.heyes@darpa.mil</u>>;
Vanlandingham, Andy (Appropriations)
<<u>Andy Vanlandingham@appro.senate.gov</u>>
Subject: connection for briefing on Enhanced Attribution

Lisa –

Andy Vanlandingham is interested in learning more about DARPA's Enhanced Attribution cybersecurity program. It turns out that a current SCO program manager whom we know well is moving over to Cyber Command to help with the transition of this DARPA program to CYBERCOM. Thanks, Kirk

From:	Roberts, Kristen N
Sent:	Wednesday, August 10, 2016 8:28 AM
То:	Antonakakis, Manos; Joffe, Rodney
Subject:	Re: DARPA - EA Sub: Neustar

Hi Manos,

Thank you for the kind introduction.

Rodney, it is a pleasure to meet you and congratulations on this grand award! I am working with our contracting specialist to confirm which forms are needed to have Neustar set-up efficiently for the start of this project. I will do my best to have the subaward paperwork and PO entered by 9/30, but please note this timeline is dependent upon execution of the main project from DARPA in OSP.

I look forward to working with you on this project. Please let me know if you need any additional information.

Best, Kristen

Kristen Roberts Financial Administrator III Georgia Institute of Technology School of Electrical & Computer Engineering 266 Ferst Drive, Atlanta, GA 30332-0250 KACB-Rm 3352 Ph: 404.385.6485 Email: Kristen.roberts@ece.gatech.edu

From:

on behalf of Manos Antonakakis <manos@gatech.edu>

Sent: Wednesday, August 10, 2016 7:56 AM To: Roberts, Kristen N; Joffe, Rodney Subject: DARPA - EA Sub: Neustar Hey Kristen,

Please meet Rodney. Rodney, Kristen is my great financial admin.

Kristen, Rodney can help you with all necessary details you might need for OSP.

For Neustar, will have the following yearly breakdown: Y1: \$1M Y2: \$300K Y3: \$250K Y4: \$250K

From:	Rodney Joffe <rodney.joffe@neustar.biz></rodney.joffe@neustar.biz>
Sent:	Saturday, November 19, 2016 12:06 PM
To:	Antonakakis, Manos
Cc:	David Dagon; Farrell, Michael D; Beyah, Raheem A; Fabian Monrose Re: DARPA Team Dinner
Subject:	Re. DARPA Team Dinner
I know and am	ok with all 3.
> On Nov 19, 2 >	2016, at 10:40 AM, Manos Antonakakis <manos@gatech.edu> wrote:</manos@gatech.edu>
> and close by	aces that are good enough, likely have room for the team DARPA/hotel, we have the following options:
> > - P.F. Chang's	s (Chinese Restaurant)
-	s (Mexican Restaurant)
	n (Mediterranean Restaurant)
>	
> I can make th	ne reservations Monday, so let me know what you prefer. We
	or dinner time to be 19.30.
>	
> Thanks,	
>	
> Manos	
>	
>> Gents,	19, 2016 at 9:44 AM, Manos Antonakakis <manos@gatech.edu> wrote:</manos@gatech.edu>
>>	
-	embers of your teams?) will come out to the kick off
-	an you please confirm that you (and your team?) will be
	r a Monday dinner? I will try to get us a place walking
	om DARPA and the Hilton hotel (where most of us will be
>> staying).	
>> >> Thanks,	
>> manks,	
>> Manos	
i i i i i i i i i i i i i i i i i i i	

From: Sent:	on behalf of Manos Antonakakis <manos@gatech.edu> Wednesday, September 21, 2016 10:42 AM</manos@gatech.edu>
То:	Farrell, Michael D; Fabian Monrose; Simon Forster; Rodney Joffe; Tim Chen; dan@klondikedata.com
Cc:	David Dagon; Roberts, Kristen N
Subject:	Re: DARPA-16-34-EA-FP-023 Status Update

Folks,

We have some very minor budget discrepancies and budget formatting request that will be coming your way. The government wants you to send to them directly your budgets. Now, your data will still be in GT under my control, however, that is the way the contract will be negotiated.

Now, I will be following up individually with each one of you, with detailed instructions of what you need to revise in your quotes so we can make the process move faster and smother. When possible, I will include templates so I can make your life easier.

If you have any issues, Kristen, Dave and I are here to help.

This is a heads up.

Manos

On Tue, Sep 20, 2016 at 3:29 PM, Manos Antonakakis <manos@gatech.edu> wrote:

> Folks,

>

> Happy to report that contract negotiations have began. Stay tuned for

> more information and action items.

>

> Cheers,

>

> Manos

> Subject: Re: Neustar Proposal Language
>
> Hi Kristen, Here's the updated quote with a little additional clarity
> on the terms. You'll notice that I left the "program id" section
> blank – I'll update that when you're able to provide it to me, or we
> can just call it "DARPA".
>
> Let m know if you have any questions or concerns.
>
> VR
>
> John W Hall
>
> Neustar, Inc. / Sr. Director – Federal Business
> $(T_1)(T_2) > 0$
> [T] (571) 246-2407 [E] john.hall@neustar.biz
>
>
>
>
>
>
> The information contained in this e-mail message is intended only for
> the use of the recipient(s) named above and may contain
>
> confidential and/or privileged information. If you are not the
> intended recipient you have received this e-mail message in error
>
> and any review, dissemination, distribution, or copying of this
> message is strictly prohibited. If you have received this
>
> communication in error, please notify us immediately and delete the
> original message
>
>
>
>
>
>
>
>
>
>
>
> From: John Hall <john.hall@neustar.biz></john.hall@neustar.biz>
> Date: Thursday, November 10, 2016 at 1:30 PM
> To: "Roberts, Kristen N" <kristen.roberts@ece.gatech.edu></kristen.roberts@ece.gatech.edu>
> Subject: Neustar Proposal Language
>
> Hi Kristen,
> Im getting word from Denise Hayman and Rodney Joffee that you guys are

> making progress and getting close to being able to issue award. As
> per our last phone discussion, I am working with Neustar legal to
> provide language that will meet your organizations use case and
> support our need for some sort of user license controls. I'm planning
> on sending you a new rev of our proposal with the addition of this
> language, but am missing the DARPA program # or other identifier.
>
> Can you tell me what the contract # is or provide name or other unique id?
> Once I get this from you – I will send over the changes.
>
> Let me know if you have any questions or concerns.
>
>
> John W Hall
>
> Neustar, Inc. / Sr. Director – Federal Business
>
[T] (571) 246-2407 [E] john.hall@neustar.biz
>
>
>
>
>
>
> The information contained in this e-mail message is intended only for
> the use of the recipient(s) named above and may contain
> the use of the recipient(s) harned above and may contain
> confidential and/or privileged information. If you are not the
> intended recipient you have received this e-mail message in error
>
> and any review, dissemination, distribution, or copying of this
> message is strictly prohibited. If you have received this
>
> communication in error, please notify us immediately and delete the
> original message
>
>
>
>
>
>
>
>
>
>
>

From:Antonakakis, ManosSent:Wednesday, April 25, 2018 9:49 AMTo:Rodney JoffeSubject:Re: You still up?

Sorry, just saw the email. I am on a deadline for a few DARPA stuff.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Rodney Joffe <rjoffe@centergate.com> Sent: Tuesday, April 24, 2018 11:25:31 PM To: Antonakakis, Manos Subject: You still up? From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, April 18, 2018 7:44:01 PM To: Smith, Jonathan <jonathan.smith@darpa.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: I'll be available after 5PM.

Sorry, JMS. Just saw your email. I will be available all evening.

Please note that tomorrow I will go in for the extraction of my wisdom teeth. I am not sure when and in what condition I will be after this.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Smith, Jonathan <jonathan.smith@darpa.mil> Sent: Wednesday, April 18, 2018 2:24:23 PM To: Antonakakis, Manos Cc: Keromytis, Angelos Subject: I'll be available after 5PM.

-JMS

Jonathan M. Smith Jonathan.Smith@darpa.mil T: 703.526.4176; C: 571.481.7228 From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, April 26, 2018 3:08:11 AM To: Antonakakis, Manos <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, April 26, 2018 3:08:11 AM Subject: Re: Info Attachments: Nameless.txt (13.14 KB) From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Wednesday, August 16, 2017 11:14:19 PM

To: Keromytis, Angelos<angelos.keromytis@darpa.mil>

CC: mikef@kududyn.com; Patel, Tejas (contr-i2o)<tejas.patel.ctr@darpa.mil>

Subject: Re: interesting article

Ground truth in attribution exercises is rare but very welcome information.

Typos due to mobile device ...

On Aug 16, 2017, at 17:39, Keromytis, Angelos <<u>angelos.keromytis@darpa.mil</u>> wrote:

https://mobile.nytimes.com/2017/08/16/world/europe/russia-ukraine-malware-hackingwitness.html? From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, November 2, 2017 6:49:48 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: Re: interesting article Attachments: EA.gif (1.88 MB)

This gif summarizes what we are capable of doing!

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Thursday, November 2, 2017 1:45:20 PM To: Antonakakis, Manos Cc: Patel, Tejas (contr-i2o) Subject: interesting article

https://www.washingtonpost.com/news/the-switch/wp/2017/11/02/what-is-qiwi-and-how-is-it-related-to-russianelection-ads/ From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, July 14, 2017 3:32:31 PM To: Antonakakis, Emmanouil K <manos@gatech.edu> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, July 14, 2017 3:32:31 PM Subject: Re: Interesting Attribution Test Attachments: Nameless.txt (2.15 KB)

From:	Keromytis, Angelos <angelos.keromytis@darpa.mil></angelos.keromytis@darpa.mil>
Sent on:	Sunday, April 29, 2018 3:07:23 PM
To:	Tejas Patel <tejas@kududyn.com></tejas@kududyn.com>
CC:	Antonakakis, Manos <manos@gatech.edu>; Schneck, Christopher (contr-</manos@gatech.edu>
	i2o) <christopher.schneck.ctr@darpa.mil></christopher.schneck.ctr@darpa.mil>
Signed by:	KEROMYTIS.ANGELOS.D.1501999799 on Sunday, April 29, 2018 3:07:22 PM
Subject:	Re: Interesting talk
Attachments: Nameless.txt (1.09 KB)	

Yes, I did say "as far as EA is concerned".

On Apr 29, 2018, at 10:27, Tejas Patel <<u>tejas@kududyn.com</u>> wrote:

He does make a comment about "unless you are at one of the three letter agencies down the road..."

I see him looking at it from the perspective of what his company can do that is meaningful (i.e. Charge customers).

Get Outlook for iOS

From: Keromytis, Angelos <angelos.keromytis@darpa.mil>
Sent: Sunday, April 29, 2018 10:25:53 AM
To: Antonakakis, Manos
Cc: tejas@kududyn.com; Schneck, Christopher (contr-i2o)
Subject: Re: Interesting talk
Wow...I watched the first 10 minutes, and I think I disagreed with almost every other point he
made, as far as EA is concerned :)

> On Apr 29, 2018, at 08:16, Antonakakis, Manos <<u>manos@gatech.edu</u>> wrote:

>

> <u>https://www.youtube.com/watch?v=u-j4KP_ls1Q</u>

>

> Do not agree with all he talked about, but he makes several points that are valid.

>

> —

> Manos Antonakakis | manos@gatech.edu

> Georgia Institute of Technology

> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Sunday, April 29, 2018 2:25:53 PM To: Antonakakis, Manos <manos@gatech.edu> CC: tejas@kududyn.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Sunday, April 29, 2018 2:25:52 PM Subject: Re: Interesting talk Attachments: Nameless.txt (493 Bytes) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Sunday, April 29, 2018 3:28:03 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: tejas@kududyn.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: Interesting talk

Yes, he has a fundamental confusion on what attribution is. However, the way he tracks TTPs is interesting.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Sunday, April 29, 2018 10:25:53 AM To: Antonakakis, Manos Cc: tejas@kududyn.com; Schneck, Christopher (contr-i2o) Subject: Re: Interesting talk

Wow...I watched the first 10 minutes, and I think I disagreed with almost every other point he made, as far as EA is concerned :)

> On Apr 29, 2018, at 08:16, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> https://www.youtube.com/watch?v=u-j4KP_ls1Q

>

> Do not agree with all he talked about, but he makes several points that are valid.

>

> —

- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Sunday, April 29, 2018 3:08:23 PM To: Antonakakis, Manos <manos@gatech.edu> CC: tejas@kududyn.com; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Sunday, April 29, 2018 3:08:22 PM Subject: Re: Interesting talk Attachments: Nameless.txt (1.12 KB) From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Thursday, April 12, 2018 4:51:45 PM

To: Hook, Lisa<lisa.hook@team.neustar>

CC: Michael Sussmann

Lisa, I just boarded a flight to DC, where I will spend the rest of my day with meetings at DARPA. Tomorrow, my entire day will be spend at the HACCS kickoff meeting where I will be presenting the 4 years research agenda of the program.

Michael, nice to meet you. I can get on a call today between 17.00 and 18.00, tomorrow after 20.00 and over the weekend anytime you want. All times are EST.

To be totally honest, I would like to clarify what the request is here as a first step. What I sent Rodney was discoveries of malicious activities in the AU networks as part of technology we are creating for the USG. This is not technology that is related with Neustar — beyond the fact that we used your data.

Could Neustar offer something similar? Sure, since you have the data. :) However, what GT is doing (the technology we are generating) is for the USG (DoD to be precise).

Thanks and hopefully this message clarifies things a bit.

Manos

Typos due to mobile device ... On Apr 12, 2018, at 11:39, Hook, Lisa <<u>lisa.hook@team.neustar</u>> wrote:

Manos meet Michael,

Michael is our longtime outside counsel on national security and other issues. He is working with Rodney on a proposal to provide analytics similar to what you are doing in Australia.

Rodney is closed off right now and Michael needs someone to steak to for more details on the service we provide so he can write up a proposal.

Hoping you two can jump on the phone asap.

Thanks -- Lisa

Lisa A. Hook Neustar Inc/ President & Chief Executive Officer 120 SW 8th Street, Miami FL 33130 Office: 571.434.5630 Mobile: 202.907.5672 <u>lisa.hook@team.neustar/www.neustar.biz</u> >> Subject: Re: introduction

- >>
- >> Kirk, thanks for the intros.

>>

>> Lily, pleased to meet you!

>>

>> This Friday works for me. The week after the next I will be hosting a hackathon at GT for DARPA, so my schedule will be less flexible. If you come up with a date, I will try to make it work but I cannot promise that I will be able to.

>>

>> Many thanks,

>>

>> --

>> Manos Antonakakis | Associate Professor | manos@gatech.edu School of Electrical and Computer Engineering Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, November 6, 2018 4:45:09 PM To: Stevens, Rock A MAJ USARMY 780 MI BDE (US) <rock.a.stevens.mil@mail.mil>; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil>; Schneck, Christopher J CTR (US) <christopher.schneck.ctr@darpa.mil>; Kline, Allison M CTR (US) <allison.kline.ctr@darpa.mil>; Smith, Jonathan <Jonathan.smith@darpa.mil> Subject: Re: Introductions (UNCLASSIFIED)

Rock, always happy to help the good guys do their job better. :)

In order for me (and my team) to be able to keep doing this, I would very much appreciate if you keep in the loop Angelos and/or JMS (at the very least) on the way you plan to use the datasets provided to you by this case study (conducted for EA).

It is very important to treat with caution and ultimately protect our EA data sources. Miss-treatment of these data could have significant implications for entire program.

Many thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Stevens, Rock A MAJ USARMY 780 MI BDE (US) <rock.a.stevens.mil@mail.mil> Sent: Tuesday, November 6, 2018 10:23:52 AM To: Antonakakis, Manos; Keromytis, Angelos D CIV DARPA (US); Schneck, Christopher J CTR (US); Kline, Allison M CTR (US) Subject: RE: Introductions (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Manos,

I cannot thank you enough for helping me better understand your research and its impact. I'm excited about our collective partnership together.

Sincerely, Rock

Rock Stevens, MAJ, USA Director, Joint Mission Operations Center (JMOC) - Georgia | Chief, Cyber Solutions Development (CSD) - Georgia Comm: 706-849-4619 (DSN: 502) | NSTS: 681-8763 S: rock.a.stevens.mil@mail.smil.mil | TS: rastev2@nsa.ic.gov

CLASSIFICATION: UNCLASSIFIED

From: Antonakakis, Manos <manos@gatech.edu> Sent on: Tuesday, May 1, 2018 2:46:44 PM To: Thomas X. Grasso, Jr. <tom@ncfta.net> CC: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: Re: Introductions and invitation to DARPA EA PI meeting

Angele, talked with Tom on the phone. He will be linking us with the right people. Let's see if they can attend.

Tom, many thanks for the call!

Thanks, Manos

Typos due to mobile device ...

> On May 1, 2018, at 09:35, Thomas X. Grasso, Jr. <tom@ncfta.net> wrote:

>

> Manos, sorry for the delay in responding to you. So I may not be the right guy for your meeting because I do not even know what "EA PI" is. I guess I need to get a clue. No matter, if you need FBI attendance we can get someone there. Let me know. Feel free to call if that is easier.

> > Thanks.

- >
 > --Tom
 > Thomas X. Grasso, Jr.
 > Unit Chief
 > Federal Bureau of Investigation
 > Cyber Division
 > Mobile: +1 724 814-6500
 > -->
- >
- >
- >

>> -----Original Message-----

- >> From: Antonakakis, Manos [mailto:manos@gatech.edu]
- >> Sent: Tuesday, April 24, 2018 7:51 PM

```
>> To: Thomas X. Grasso, Jr.
```

- >> Cc: Keromytis, Angelos D CIV DARPA (US)
- >> Subject: Introductions and invitation to DARPA EA PI meeting
- >>
- >> Hey Tom,
- >>
- >> Hope you are doing great!

>>

- >> Allow me to introduce you to the DARPA PM Dr. Angelos Keromytis.
- >> Angelos happens to be the PM from one of my projects with focus on
- >> attack attribution.

>>

- >> We are having the next PI meeting at Georgia Tech in Atlanta, June 8th.
- >> We would be very happy to have you in this meeting, if you want to join
- >> us. Angelos can give you more details about what we will be talking
- >> about if you ping him on the classified network.

From: Keromytis, Angelos <angelos.keromytis@darpa.mil>

Sent on: Wednesday, May 2, 2018 2:16:20 PM

To: Thomas X. Grasso, Jr. <tom@ncfta.net>

CC: Antonakakis, Manos <manos@gatech.edu>; mjmckeown@fbi.gov; wdware@fbi.gov; chunt@fbi.gov; Schneck,

Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil>

Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, May 2, 2018 2:10:50 PM

Subject: Re: Introductions and invitation to DARPA EA PI meeting

Attachments: Nameless.txt (4.06 KB)

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, April 18, 2018 2:02:15 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Garrison, William R <wgarrison7@gatech.edu>; Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, April 18, 2018 2:02:14 PM Subject: Re: Intros, web portal and data Attachments: Nameless.txt (3.79 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, April 18, 2018 1:59:00 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Garrison, William R <wgarrison7@gatech.edu>; Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, April 18, 2018 1:58:59 PM Subject: Re: Intros, web portal and data Attachments: Nameless.txt (3.03 KB) From: Angelos D. Keromytis

Sent on: Thursday, June 28, 2018 10:23:06 PM

To: Antonakakis, Manos <manos@gatech.edu>

Subject: Re: Invitation to Participate in the Association of the United States Army's Institute of Land Warfare (AUSA ILW) Army Cyber and Networks Hot Topic Symposium on Thursday, August 2, 2018

Nope (although they may have gotten your name through/because of the work with DARPA - not that it matters).

Looks like the topic has nothing to do with EA/HACCS, so no reason to mention those (if you decide to go, which I encourage you to do if just for the networking).

-Angelos

> On Jun 28, 2018, at 14:28, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> This has nothing to do with something you are working on, right?

>

> —

> Manos Antonakakis | manos@gatech.edu

- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- >

> From: Guy C. Swan <GSwan@AUSA.ORG>

> Sent: Thursday, June 28, 2018 2:16 PM

> To: joseph.p.mcgee2.mil@mail.mil; jeffrey.sorenson@atkearneypsds.com; thomas.c.seamands.mil@mail.mil; Antonakakis, Manos; manos@antonakakis.org; apaller@sans.org; DGilbertson@sans.org

> Cc: Lori Wulf; Vandermaarel, Cathy B CIV USARMY ARCYBER (US); nicholas.a.azzolini.mil@mail.mil;

karmin.ng2.mil@mail.mil

> Subject: Invitation to Participate in the Association of the United States Army's Institute of Land Warfare (AUSA ILW) Army Cyber and Networks Hot Topic Symposium on Thursday, August 2, 2018

>

> BG Joseph P. "JP" McGee, United States Army, Deputy Commanding General (Operations), United States Army Cyber Command

> LTG Jeffrey Sorenson, United States Army Retired, Partner and President, A.T. Kearney Public Sector & Defense Services, LLC

> LTG Thomas C. Seamands, United States Army, Deputy Chief of Staff, G-1, United States Army

> Dr. Manos Antonakakis, Ph.D., Associate Director - Attribution, Institute for Information Security & Privacy, and

Associate Professor, School of Electrical & Computer Engineering, Georgia Institute of Technology

> Mr. Alan Paller, Research Director and Founder, SANS Institute

> >

> Gentlemen,

>

> Planning is well underway for the 2017 Association of the United States Army's Institute of Land Warfare (AUSA ILW) Army Cyber and Networks Hot Topic Symposium to be held Thursday, August 2, 2018 at the General Gordon R. Sullivan Conference Center at 2425 Wilson Boulevard, Arlington VA 22201. Our AUSA "Hot Topics" symposiums continue to be well-received professional development forums as well as an opportunity for broader audiences to understand issues of major importance to the Army.

>

> On behalf of General Carter F. Ham, the president of AUSA, I would like to ask you to participate in this forum.

>

> The theme for this year's symposium is "Cyberspace, the Army Network, and Multi Domain Operations." The cyber domain remains a contested environment and one that directly effects the Army network. The warfighter today needs to understand, defend, and exploit this environment in order to win on the multi-domain battlefield.

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Saturday, January 6, 2018 5:45:03 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Saturday, January 6, 2018 5:45:03 PM Subject: Re: IoCs Active DNS reflection Attachments: Nameless.txt (1.44 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, January 9, 2018 10:28:23 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, January 9, 2018 10:28:23 PM Subject: Re: loCs Active DNS reflection Attachments: Nameless.txt (2.96 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, April 26, 2018 6:30:15 PM To: Hall, John <John.Hall@team.neustar> CC: Joffe, Rodney <Rodney.Joffe@team.neustar> Subject: Re: Ip Intelligence for HACCS

Sure John, you can call me on the top of the hour.

Happy to help you out in any way I can. However, is DARPA aware that GT will need a 56% overhead on this, that is in order for you to get these \$3M, I will need to come up with an add-on for HACCS and a budget that is in the order of ~\$5.7M (just for this add-on)?

Are they OK with this?

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Hall, John <John.Hall@team.neustar> Sent: Thursday, April 26, 2018 1:25:40 PM To: Antonakakis, Manos Cc: Joffe, Rodney Subject: Ip Intelligence for HACCS

Hello Manos,

We were recently in with the HACCS Team in Arlington. We discussed a number of things, including strategies for procuring Neustar IP Intelligence for the program. Since we already have a contractual relationship with GTRC, we think that it would be ideal to work with your organization to fulfill this requirement. At a high level, we're proposing an unlimited 1 year license @ an annual subscription cost of \$3M. Let me know when you have a few minutes to discuss or if you'd like to delegate to your contracts team.

Thanks in advance

John W Hall Neustar, Inc. / Sr. Director – Federal Business [T] (571) 246-2407 [E] john.hall@neustar.biz

The information contained in this e-mail message is intended only for the use of the recipient(s) named above and may contain

confidential and/or privileged information. If you are not the intended recipient you have received this e-mail message in error

and any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify us immediately and delete the original message

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, March 8, 2018 7:31:49 PM To: Antonakakis, Manos <manos@gatech.edu> CC: tejas@kududyn.com Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, March 8, 2018 7:31:47 PM Subject: Re: Joint Analysis Report + NERC Alert Attachments: Nameless.txt (1.53 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, March 8, 2018 7:14:08 PM To: Antonakakis, Manos <manos@gatech.edu> CC: tejas@kududyn.com Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, March 8, 2018 7:14:06 PM Subject: Re: Joint Analysis Report + NERC Alert Attachments: Nameless.txt (1001 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, March 8, 2018 6:48:20 PM To: Antonakakis, Manos <manos@gatech.edu> CC: tejas@kududyn.com Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, March 8, 2018 6:48:18 PM Subject: Re: Joint Analysis Report + NERC Alert Attachments: Nameless.txt (470 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, March 8, 2018 7:33:34 PM To: Antonakakis, Manos <manos@gatech.edu> CC: tejas@kududyn.com Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, March 8, 2018 7:33:32 PM Subject: Re: Joint Analysis Report + NERC Alert Attachments: Nameless.txt (2.13 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, January 10, 2018 9:49:40 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: Re: just for giggles

They should have attended our last site review meeting. Combosquatting rocks.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: Antonakakis, Manos <manos@gatech.edu> Sent on: Thursday, January 11, 2018 3:56:17 AM To: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: just for giggles

My surprise was not with Angelos, but with the DARPA mail server.

This has been reported, was in the news, and the mail server allowed the email with the link to fly out from a .mil address.

That is bad in so many levels.

Typos due to mobile device ...

> On Jan 10, 2018, at 22:47, Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> wrote:

>

> I got the link from a trusted source so I clicked on it. Last time I trust Angelos. It was a 403 Forbidden. Boo.

>

> -Tejas

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, February 27, 2018 2:54:11 PM To: Antonakakis, Manos <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, February 27, 2018 2:54:02 PM Subject: Re: Just FYI Attachments: Nameless.txt (695 Bytes) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Monday, October 1, 2018 7:28:03 PM To: Beyah, Raheem A <rbeyah@ece.gatech.edu>; □ □ CC: Ahamad, Mustaque <mustaq@cc.gatech.edu>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Blough, Douglas M <doug.blough@ece.gatech.edu>

Subject: Re: letter to the administration

Wenke, since you will be revising the letter I would like to point out a couple of larger issues I had with the letter. Didn't brought them up for a number of reasons.

Let me second the point that Raheem brought up. I have no desire to create any problems to the huge effort that ECE/COE has put together so they can find space for me and Angelos. To my understanding this space is in Klaus, and it is final. To that end, I would kindly suggest that we try to work alongside this ECE/CEO effort and not against it. Vis-a-vis, any discussion about moving away from Klaus at this point looks like a moot point to me, and can only create problems to me and Angelos.

I suspect that Angelos is on the same page with me, but, I will let him speak for himself.

My second point, and in the larger theme of this letter, my suggestion would be that you do not confuse the "working good together" issue with the "we all need to be on the same space" issue. You can make a very strong case on the first -- all the great hard facts you pointed out --- and of course having all of us sign the letter. On the later issue, whatever you say (we say) is a wishful thinking and nothing more.

Having no doubt that we do work together well, I suspect, will open the door for securing space in Klaus for all of us down the road. I do not think we can achieve both with this letter.

Cheers,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Beyah, Raheem A Sent: Monday, October 1, 2018 1:48:21 PM To: 🗆 🗆 Cc: Ahamad, Mustaque; Kim, Taesoo; Boldyreva, Alexandra; Vlad Kolesnikov; Antonakakis, Manos; Saltaformaggio, Brendan D; Keromytis, Angelos; Blough, Douglas M; Farrell, Michael D

Subject: Re: letter to the administration

Wenke et al.,

I've reviewed the letter and I'm unable to sign it in its current form. I have several conflicts given the current roles I play in the administration. Also, the tone of the letter is a bit stronger than I feel comfortable with. I'm traveling back from Saudi Arabia and I have several critical items on my plate preventing me from taking a significant amount of time to revise the letter to a point where I feel comfortable. I will, however, send you a "clean" email stating that I think the CoC and ECE are working well together with research and teaching and that I support collocation of security faculty (you can use this as an addendum if you please). However, to be transparent, collocation would only work for me if we're in Klaus given my frequent meetings in Van Leer.

Best,

Raheem

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, October 2, 2018 4:56:46 PM To: \Box

CC: Vlad Kolesnikov >; Ahamad, Mustaque <mustaq@cc.gatech.edu>; Boldyreva, Alexandra <sasha@gatech.edu>; Saltaformaggio, Brendan D <brendan@ece.gatech.edu>; Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; Kim, Taesoo <taesoo@gatech.edu>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Blough, Douglas M <doug.blough@ece.gatech.edu>; Beyah, Raheem A <rbeyah@ece.gatech.edu>

Subject: Re: letter to the administration

Wenke, my point is that you can achieve both points (perhaps more effectively) without a letter if you have an honest discussion between the two units.

We are very successful as an area, we do not have to prove to anyone, anything. The numbers speak for them selves. We should not be in the business of writing letters refuting rumors.

If the goal is to honestly have CS and ECE working together longterm, you/Mustaque and Angelos/Raheem should have a discussion with the Chairs and tell them to come up with a strategy on space and faculty, so we can move forward with a single plan that serves all of us, the faculty. If the ECE and CS Chairs are on the same page, then this rumor holds no water. The only reason that this rumor has any merit at this point is because I suspect that the two units are not on the same page. Let's get them there.

Again, the letter will only give legitimacy to the rumors. Our position should be, we are not even going to spend time seriously looking at this as an allegation. We have more important things to do, like writing the next paper or winning the next grant together.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Wenke Lee >

Sent: Tuesday, October 2, 2018 11:32:47 AM

To: Antonakakis, Manos

Cc: Vlad Kolesnikov; Ahamad, Mustaque; Boldyreva, Alexandra; Saltaformaggio, Brendan D; Farrell, Michael D; Kim, Taesoo; Keromytis, Angelos; Blough, Douglas M; Beyah, Raheem A Subject: Re: letter to the administration

These two problems have been made intertwined: at least some people in the upper management have said "these two groups don't want to work together and therefore there is no need to allocate large space for them to be together" - that is what I referred to in the earlier version of the letter that we were put in a catch-22 situation (perhaps on purpose because other groups wanted all arguments they could find to grab more space for themselves).

The letter severs two purposes: 1) layout the facts of our collaboration to dispel the rumor (I personally preferred the stronger language of the earlier version, by quoting specifically what they said wrong). Saying nothing is not helping us because I first heard this rumor more than a year ago, I protested but as a group we didn't

say/write anything, now the rumor only gets repeated/intensified; why would this letter confirm the rumor? 2) encourage the chairs (and upper management if necessary) to hear the faculty (hence the letter and suggested meeting), not just two senior faculty members, that we want to be in the space, ideally Klaus ideally, and coordinate on faculty hiring - and such collaboration will put the rumor to rest.

The letter is really used as input from the faculty that the units and upper management should consider.

Wenke

On Tue, Oct 2, 2018 at 11:02 AM Antonakakis, Manos <manos@gatech.edu> wrote:

>

> It appears that there are two different problems hidden here and we are trying to solve them in a single shot. Looks very suboptimal to me.

>

> The first problem is what happened in the CS faculty meeting, which I can only imagine was something along the lines "the two groups do not work well with each-other". If we need to clarify this point so the CS faculty can have the necessary power with their Chair, then we can address the letter to Lance and put this at rest once and for all.

>

> Now, the second and most important problem, I think, has to do with longterm space allocation and faculty slots. The only way to achieve this is an unified message (to the upper management) between the two units (CS and ECE) on how we should grow security longterm. If the critics of this idea are in the upper management and if they believe the rumors about us, then this letter will only confirm the rumors. That is, if the rumors were not true, why the hell this letter needs to be written?

>

> My point here is that if we want a winning solution to the second problem, we need to unofficially build consensus between the two units, and then officially go to the upper management with a single voice. IMHO, you do not build the consensus with such a letter. Have a meeting between the Chairs and two senior faculty (one from each unit) and work things out.

> > —

- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- > >
- > _____
- > From: Wenke Lee
- > Sent: Tuesday, October 2, 2018 9:48:05 AM
- > To: Vlad Kolesnikov

> Cc: Ahamad, Mustaque; Boldyreva, Alexandra; Saltaformaggio, Brendan D; Farrell, Michael D; Kim, Taesoo;

angelos.keromytis@darpa.mil; Blough, Douglas M; Antonakakis, Manos; Beyah, Raheem A

- > Subject: Re: letter to the administration
- >

>

> Yes, the letter can be used by the chairs to go up the chain if necessary. More immediately, it also applies pressure for the two chairs to work together to help us.

> On Tue, Oct 2, 2018 at 9:10 AM Vlad Kolesnikov < wrote:</p>

> My understanding is that having this letter allows chairs to bring it up the chain and more easily defeat the opinion that we don't like each other. Apparently that's a concern. We discussed it in CS faculty meeting, and agreed that a letter like that would be good ammunition to have should the need arise.

- >
- > vlad

> On Tue, Oct 2, 2018 at 9:02 AM Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:
 > If "them" refers to people above the Chairs of ECE and CS, then having a meeting with Magnus and Lance is kind of pointless. Both of them know already that the security faculty work together.

>

> At this point I am really confused of what is the goal of this letter. I was under the impression that the goal of this letter was to clarify to the upper management ("them") that security people have no issue working together. Using this letter to have Lance and Magnus have a meeting looks like a waist of time.

>

> They had meetings in the past, and the CS Chair want to have a say in what ECE is doing and who is doing it. That is not something that simply will not fly --- sorry but it does not make any sense and it is kind of ridiculous.

> Folks, are we setting ourselves up for failure here?

>

>

> —

> Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>>

> Georgia Institute of Technology

> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

>

>

> _

> From: Wenke Lee

> Sent: Monday, October 1, 2018 10:54:03 PM

> To: Keromytis, Angelos

> Cc: Beyah, Raheem A; Ahamad, Mustaque; Kim, Taesoo; Boldyreva, Alexandra; Vlad Kolesnikov; Antonakakis, Manos; Saltaformaggio, Brendan D; Blough, Douglas M; Farrell, Michael D

> Subject: Re: letter to the administration

>

> On Mon, Oct 1, 2018 at 10:24 PM Keromytis, Angelos

> <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>> wrote:

> >

> >

> > 1. If the concrete suggestion is for Lance and Magnus to get together, why are we sending this all the way to the Provost and the VP-R?

> >

> We don't have to include folks all the way up - unless we later find

> out that Lance and Magnus can't work together. So, for now, I change

> it to address these two.

>

> > 2. If we have a group meeting (with all the admin recipients?), what would we tell them that we can't tell them now? If there is a specific agenda for said meeting, we should give at least a hint.

> > >

> I think the letter is clearer now - talk about mostly space and

> perhaps faculty hiring.

>

> > 3. Rather than just sending the letter, may I suggest we sign it but then have two reps (one from CS, one from ECE?) just sit down with each of the folks and discuss the topics? The letter would then act as "proof" of consensus/agreement, should they be questioned as to representation.

>

> That is a good suggestion.

> > >

> > Just sending a letter can make it an "us vs. them" situation, which could become counterproductive.

> >

> "Them" was some people working under the Deans, Provost, and EVPR. I

> will figure out a better way to stop them.

From:	Keromytis, Angelos <angelos.keromytis@darpa.mil></angelos.keromytis@darpa.mil>
Sent on:	Friday, December 15, 2017 10:25:28 PM
To:	Farrell, Michael <michael.farrell@gtri.gatech.edu></michael.farrell@gtri.gatech.edu>
CC:	Antonakakis, Emmanouil K <manos@gatech.edu>; Patel, Tejas (contr-</manos@gatech.edu>
	i2o) <tejas.patel.ctr@darpa.mil></tejas.patel.ctr@darpa.mil>
Signed by:	KEROMYTIS.ANGELOS.D.1501999799 on Friday, December 15, 2017 10:25:27 PM
Subject:	Re: meeting and stuff
Attachments: Nameless.txt (1.89 KB)	

OK...keep us in the loop, so we can plan accordingly.

On Dec 15, 2017, at 5:15 PM, Farrell, Michael <<u>Michael.Farrell@gtri.gatech.edu</u>> wrote:

We talked 1/29. Not 2/2 specifically. Yes been doing coordination with Scott. Will circle back with him.

—MF

On Dec 15, 2017, at 15:25, Keromytis, Angelos <<u>angelos.keromytis@darpa.mil</u>> wrote:

Umm...then, I don't know why/how Scott converged on that day. Michael, are you coordinating with Scott? -Angelos

-----Original Message-----

From: Antonakakis, Manos [mailto:manos@gatech.edu]

Sent: Friday, December 15, 2017 3:24 PM

To: Keromytis, Angelos <<u>angelos.keromytis@darpa.mil</u>>; Farrell, Michael D < <u>Michael.Farrell@gtri.gatech.edu</u>>

Cc: Patel, Tejas (contr-i2o) <<u>tejas.patel.ctr@darpa.mil</u>>

Subject: Re: meeting and stuff

February 2nd is definitely a bad day, as Michael and I are hosting MS in GT.

On the ExploderBot, we will dive deep into it, yes.

Manos Antonakakis | manos@gatech.edu

Georgia Institute of Technology

FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos angelos.keromytis@darpa.mil>

Sent: Friday, December 15, 2017 2:33:13 PM

To: Antonakakis, Manos

Cc: Patel, Tejas (contr-i2o)

Subject: meeting and stuff

Mano,

The meeting is being scheduled for February 2 --- I *assume* Michael is the one on your side that is talking to Scott and doing the planning.

On a different note, it may be worth having a student look at a malware/botnet that some folks in industry have named ExploderBot.

-Angelos

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, November 30, 2018 4:42:27 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Message Notification

Making arrangements with Chris to resend.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Friday, November 30, 2018 11:40:52 AM To: Antonakakis, Manos Subject: Fwd: Message Notification

Begin forwarded message:

From: Mail Delivery System <MAILER-DAEMON@mailgate3.darpa.mil<mailto:MAILER-DAEMON@mailgate3.darpa.mil>> Date: November 30, 2018 at 11:38:03 EST To: <jonathan.smith@darpa.mil<mailto:jonathan.smith@darpa.mil>>, <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>, <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>> Subject: Message Notification

Dear ITS Customer:

We regret that an email message sent to you from "Antonakakis, Manos" <manos@gatech.edu<mailto:manos@gatech.edu>> with a subject of Final slide deck for PI meeting could not be delivered as it exceeds the 40MB email attachment limit on the DARPA Unclassified Network.

Please request that the sender deliver the file to you via another method.

If you have any questions or concerns or require assistance with other methods to deliver the file, please contact the ITS Help Desk at (703) 527-5527 (Toll-free 1-888-562-6742) or send a message to Action@darpa.mil< <u>mailto:Action@darpa.mil</u>>.

Respectfully,

ITS Customer Support

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, May 10, 2018 10:35:46 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; tejas@kududyn.com Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, May 10, 2018 10:35:46 PM Subject: Re: Monday visit Attachments: Nameless.txt (40.11 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, April 24, 2018 1:37:42 AM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> CC: Antonakakis, Manos <manos@gatech.edu>; Tejas Patel <tejas@kududyn.com> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, April 24, 2018 1:37:42 AM Subject: Re: Monday visit Attachments: Nameless.txt (10.36 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, May 11, 2018 3:08:58 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; manos@gatech.edu CC: tejas@kududyn.com Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, May 11, 2018 3:08:55 PM Subject: RE: Monday visit Attachments: Nameless.txt (41.12 KB) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, June 22, 2018 4:37:38 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, June 22, 2018 4:37:37 PM Subject: Re: More Data from the CPB Attachments: Nameless.txt (906 Bytes) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, February 12, 2019 4:10:03 AM To: Rodney Joffe <rodney.joffe@team.neustar>; Christopher Schneck <christopher.schneck.ctr@darpa.mil> Subject: Re: Neustar Executive Visit to PI meeting March 8th

Thanks you Rodney for the email.

For you guys to attend the site visit I will need to get the green light from Chris. Chris, can you please check and let us know if you have any issues with this?

Thanks, Manos

Typos due to mobile device ...

> On Feb 11, 2019, at 21:06, Rodney Joffe <rodney.joffe@team.neustar> wrote:

>

> Hello Manos,

>

> As you know Neustar has been very involved in developing and improving our ability to provide capabilities and resources for you based on the apparent success of your EA and HACCS programs, using our data.

>

> As a result, I wonder if it would be possible for me, our CEO Charlie Gottdiener, Venkat Achanta, our Chief Data Officer, and Adm. (Ret) Mike Mullen (past Chairman of the Joint Chiefs) who is a board director of our data subsidiary to visit you during the PI day on March 8th?

>

> I think it would be extremely beneficial for my colleagues to see and understand the impact of our efforts, and to realize just how much of a difference we can make to the country's National Security efforts through GA Tech.

>

> They all obviously understand the sensitivity of the PI briefing and meeting, and would respect and sign whatever attendee documents are required of other sub-contractors on your program.

> Respectfully

>

>

- > Rodney
- >
- > Rodney Joffe
- > SVP, Senior Technologist, and Fellow
- > National Security Executive
- > Neustar, Inc.
- > 21575 Ridgetop Circle
- > Sterling VA 20166
- > USA
- > +1 202-533-2900 Direct
- > +1 602-418-6471 Cell
- > rodney.joffe@team.neustar
- >

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, February 1, 2018 7:53:58 PM To: Antonakakis, Manos <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Thursday, February 1, 2018 7:53:51 PM Subject: Re: New ActiveDNS O(1) query system and Hypergraph Attachments: Nameless.txt (705 Bytes) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, August 25, 2017 6:02:45 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Nomination

Indeed!

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Friday, August 25, 2017 1:00:02 PM To: Antonakakis, Manos Subject: Fwd: Nomination

I told them no, but the timing of this is funny given our recent conversation :) -Angelos

Begin forwarded message:

From: "Stony Brook University CEAS - Chair, Department of Computer Science" <SBU.ChairCS@russellreynolds.com<mailto:SBU.ChairCS@russellreynolds.com>> Subject: Nomination Date: August 24, 2017 at 4:14:21 PM EDT To: "angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>" <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>>

Dear Dr. Keromytis,

On behalf of the Search Committee for the next Chair of the Department of Computer Science at Stony Brook University, we are delighted to inform you that you have been nominated as a candidate for this important leadership position. The Search Committee has solicited nominations from individuals for whom they have high regard, and your name has been suggested to us with great enthusiasm as one who would be an outstanding chair.

An academic unit of the College of Engineering and Applied Sciences, the Department of Computer Science (CS) is ranked within the top tier (#40) of national universities by U.S. News and World Report, and the National Research Council ranks CS among the top 10% of computer science graduate programs in the U.S. In the most recent Gourman report of undergraduate computer science programs, Stony Brook was ranked 15th in the U.S. and second in New York State. The Computer Science department has seen a substantial increase in majors as enrollment has grown from 678 undergraduates in 2012 to over 1,100 today. Computer Science is now the third largest undergraduate major on campus. With annual research expenditures of approximately \$8 million, the department is home to 42 tenured and tenure-track faculty members, 10 teaching and research faculty, and 500 graduate students (200 of which are Ph.D. students). Many of the faculty are engaged in multidisciplinary research with colleagues in Stony Brook's School of Medicine and the nearby Brookhaven National Laboratory and Cold Spring Harbor Lab.

In 2015, the department opened a 70,000 square-foot, state-of-the-art building to accelerate growth in collaborative research. In June 2017, the College of Engineering and Applied Sciences was awarded two grants totalling \$4.5 million to recruit and retain exceptional individuals that strengthen the University's research productivity in two high economic opportunity areas of state and national significance – artificial intelligence (AI) and cybersecurity. These hires will also accelerate the development of the emergent Institute for AI-Driven Discovery & Innovation.

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, November 9, 2017 2:57:15 PM To: Jonathan.smith@darpa.mil; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> CC: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu> Subject: Re: Notification HR001117S0051-HACCS-FP-029

Dr. Smith, and Angelos, many thanks for the great news. The team is ready to execute against the goals of this project and (as always) over deliver!

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Farrell, Michael < Michael.Farrell@gtri.gatech.edu> Sent: Wednesday, November 8, 2017 3:20:44 PM To: HACCS Cc: Antonakakis, Manos Subject: Re: Notification HR001117S0051-HACCS-FP-029

Hello,

Thank you for the notification. We are excited about the news and look forward to working this program. Standing by for further discussions about next steps.

For your records, there was a hiccup at submission time that was documented (see attached) and just want to make sure you are tracking the appropriate info (e.g. DUNS number, CAGE code, etc).

Best,

Michael

On 11/8/17, 12:31 PM, "HACCS" <haccs@darpa.mil> wrote:

Dear Proposer,

Please see the attached file regarding your proposal submission (HR001117S0051-HACCS-FP-029) that was submitted to the Harnessing Autonomy for Countering Cyberadversary Systems (HACCS) solicitation.

Regards,

DARPA/I2O

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Tuesday, August 22, 2017 9:42:58 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Tuesday, August 22, 2017 9:42:57 PM Subject: Re: On site visit update Attachments: Nameless.txt (457 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Sunday, August 27, 2017 9:51:01 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Sunday, August 27, 2017 9:51:00 PM Subject: Re: Please send again the following two set of indicators Attachments: Nameless.txt (488 Bytes) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, August 8, 2018 10:53:07 PM To: Tejas Patel <tejas@kududyn.com> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Subject: Re: POM cycles

Gents, you know more than I do in this space, and your argument Tejas is sound.

However, asking them to contribute something relatively small in the FY19 and FY20, will not only practically demonstrate their interest but also reduce our risk of delivering case studies in void. Looks to be a very basic and simply way you can "qualify" a technology transition prospect. You do not impose --- just give them the option.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Tejas Patel <tejas@kududyn.com> Sent: Wednesday, August 8, 2018 5:36:56 PM To: Antonakakis, Manos Cc: Keromytis, Angelos; Schneck, Christopher (contr-i2o) Subject: Re: POM cycles

Manos,

That makes sense... if you aren't working with the Government. POM cycles truly are a two year ordeal. What we put together will go up the chain *all the way to Congress* and back down the chain. On the way up and down people will do shenanigans that will frustrate us. Welcome to POM'ing for money. As crazy as it sounds, from my perspective, this is a *good* thing and shows that they are serious about the transition effort. The last I2O program I saw POM for money and transition was Plan X. Take a look at <u>https://defensesystems.com/articles/2017/09/20/army-cyber-defense-darpa-plan-x.aspx</u>. From the article the XX quotes that matter:

"DARPA has been partnering with Invincea Labs LLC, Arlington, VA, to create Plan X since 2013."

"On September 14[, 2017] Invincea received an additional \$20,517,535 cost-plus-fixed-fee completion modification to their initial, \$120 million, contract with DARPA."

It isn't true Invincea (now Two Six Labs) received \$120M but all the performers on Plan X combined received \$120M, it is true Invincea received a plus up of ~\$20.5M.

Regards, Tejas

Tejas Patel Principal investigator Kudu Dynamics +1 919-332-3191 (c) tejas@kududyn.com<<u>mailto:tejas@kududyn.com</u>>

On Wed, Aug 8, 2018 at 5:26 PM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote: Making estimates today for FY21 reminds me of the business plan that VCs ask from you during your pitch (and throw away the moment you are done with your pitch). Any estimates for FY21 will be by definition off the mark. Actually, the very first read of such a request places in serious doubts their overall intention/desire to transition what we do.

Perhaps, a more realistic approach is a smaller and gradual investment over the FY19 and FY20, which will allow a transition entity to get up to speed and serve them long-term through the FY21 budget. Thoughts?

Thanks,

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>> Sent: Wednesday, August 8, 2018 10:21:17 AM To: Schneck, Christopher (contr-i2o); Antonakakis, Manos; Tejas Patel (tejas@kududyn.com<mailto:tejas@kududyn.com>) Subject: Re: POM cycles

Yup

On 8/8/18, 8:39 AM, "Schneck, Christopher (contr-i2o)" <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>> wrote:

AFOSI wants our input to their FY21 POM in early FY19. I knew this was a long process, but I didn't think it was this long! I imagine USCC is in the same boat but I will ask.

So with that in mind, we have some time to work our input to that plan. I don't think it's a bad idea to start putting a draft together now to get everyone's feedback and get the process started.

V/r,

Chris Schneck DARPA I2O SETA 571-524-3821 (cell) 918-6691

-----Original Message-----From: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>> Sent: Tuesday, August 7, 2018 8:35 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>> Subject: RE: POM cycles

Chris,

We have already begun planning and prioritizing for the FY21 POM. The current POM we have in is for FY20. We should get something together early in FY19 for FY21.

Hope that helps!

Jason D. Stambaugh, SA, USAF AFOSI Cyber Investigations & Ops Deputy PM for Manpower & Training

Commercial: (571) 305-8850

DSN: (312) 240-8850 NSTS: 918-5739

SIPR: jason.d.stambaugh2.mil@mail.smil.mil<mailto:jason.d.stambaugh2.mil@mail.smil.mil> JWICS: jason.stambaugh@af.ic.gov<mailto:jason.stambaugh@af.ic.gov>

-----Original Message-----From: Schneck, Christopher (contr-i2o) [<u>mailto:christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil</u>>] Sent: Tuesday, August 7, 2018 8:48 AM To: STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil<mailto:jason.stambaugh@us.af.mil>> Subject: POM cycles

Jason,

As we are working to put together some ideas/options for transition, can you share some insight into how the POM cycles/process works? Which POM cycle are you preparing for and envision EA fitting into? FY 19, FY 20? What are the deadlines for such request?

Thanks,

V/r,

Chris Schneck DARPA I2O SETA 571-524-3821 (cell) 918-6691 From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, September 21, 2017 10:19:38 PM To: Antonakakis, Manos <manos@gatech.edu> Subject: Re: Pre pub check --- IISP presentation

https://www.rand.org/pubs/research_reports/RR2081.html

On Sep 21, 2017, at 5:17 PM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

I will. No I have not. Can you share it?

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil>> Sent: Thursday, September 21, 2017 5:15:44 PM To: Antonakakis, Manos Cc: Patel, Tejas (contr-i2o) Subject: Re: Pre pub check --- IISP presentation

This is fine. Push it through DISTAR.

Also, you've seen the RAND report on attribution?

On Sep 21, 2017, at 4:30 PM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

Guys, I will be giving the following talk to the IISP Attribution summit next week. It is hard to talk about attribution for 20 minutes without saying anything, however I think I figured it out.

See attached slides, and let me know if you have any problems with any of the slides.

Cheers,

Manos Antonakakis | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>> Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

<Attribution.pptx>

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, January 5, 2018 5:23:15 PM To: Antonakakis, Manos <manos@gatech.edu> CC: mikef@kududyn.com; Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, January 5, 2018 5:23:14 PM Subject: Re: probably useful in the near future Attachments: Nameless.txt (1.14 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, August 22, 2018 9:09:55 PM

To: Smith, Jonathan <jonathan.smith@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Lever, Charles C <chazlever@gatech.edu>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu> Subject: Re: RAID Travel Authorization

Many thanks JMS!

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Smith, Jonathan <jonathan.smith@darpa.mil> Sent: Wednesday, August 22, 2018 12:43:51 PM To: Antonakakis, Manos; Keromytis, Angelos Cc: Lever, Charles C; Mitchell, Michael F Subject: Re: RAID Travel Authorization

Approved. -JMS

On 8/22/18, 11:10 AM, "Antonakakis, Manos" <manos@gatech.edu> wrote:

PM Team, Chaz would like to attend the RAID conference. I think this will be beneficial for our EA project. Can I please get the green light from you on this?

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Mitchell, Michael F Sent: Wednesday, August 22, 2018 9:03:03 AM To: Lever, Charles C Cc: Antonakakis, Manos Subject: Re: RAID Travel Authorization

Yes you will need to create a travel authorization. Additionally Manos needs to request permission for you to travel on the Rhamnousia project from the sponsor prior to you booking travel.

Michael

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Sunday, August 5, 2018 12:31:27 PM To: Smith, Jonathan <jonathan.smith@darpa.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu> Subject: Re: Raid Travel

Much obliged, JMS.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Smith, Jonathan <jonathan.smith@darpa.mil> Sent: Sunday, August 5, 2018 7:28:17 AM To: Antonakakis, Manos Cc: Keromytis, Angelos; Mitchell, Michael F Subject: Re: Raid Travel

Yes

Jonathan M. Smith, DARPA/I2O T: 703.526.4176, C: 571.481.7228

> On Aug 4, 2018, at 9:14 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

>

> EA PM, team.

> needs to attend RAID because a number of interesting intrusion detection papers relevant to our detection research will be presented. Can I please have your permission to send the student to RAID?

> > Thanks,

> 111d11k

> ____

> Manos Antonakakis | manos@gatech.edu

- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- >
- > From: Mitchell, Michael F
- > Sent: Friday, August 3, 2018 6:20:55 PM
- > To: Antonakakis, Manos
- > Subject: Fwd: Raid Travel
- > > Hey Manos,

>

> I've been looking into the travel request by to attend the raid conference in Greece.

>

> Most federal programs dont allow for international travel. But since we specifically identified RAID as a program that we planned to travel to.

> I asked for guidance on this, and was told that we would need permission from the sponsor to proceed. I believe that

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Wednesday, August 29, 2018 4:12:18 PM To: manos@gatech.edu CC: Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Farrell, Michael D <Michael.Farrell@gtri.gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Wednesday, August 29, 2018 4:13:08 PM Subject: Re: Regarding D60 Attachments: Nameless.txt (850 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, August 2, 2018 10:21:42 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Hook, Lisa <lisa.hook@team.neustar>; Joffe, Rodney <Rodney.Joffe@team.neustar> Subject: Re: Regarding HACCS

(I'm not 100% sure what it is that Manos is taking responsibility for.)

Lisa, Rodney, happy to talk to you and Charlie; I'd like to keep the conversation at that level to avoid the confusion that arises from having too many cooks in the kitchen. I'm scheduled to be in Atlanta until August 22), but I can get on a plane or a phone call earlier if needed.

Best,

-Angelos

> On Aug 2, 2018, at 16:14, Antonakakis, Manos <manos@gatech.edu> wrote:

- >
- > Hey Lisa,
- >

> I would like to reiterate that I take full responsibility for the HACCS delay. The ECP (contract modification) between GT and DARPA takes time we are in the process of finalize this modification. At the same time, I would like to have Angelos relay the status of everything we are doing (HACCS and EA) in person --- especially if Charlie is available for a meeting. My understanding is that Angelos would be more than happy to swing by your offices.

- >
- > Many thanks,
- >
- > —
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >

```
From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS>
Sent on: Saturday, June 16, 2018 3:23:44 AM
To: Angelos D. Keromytis
```

Subject: Re: Revised Statement of Accomplishment

OK, thanks --- I will keep it because it will help (according to Doug).

If you are uncomfortable for whatever reason, please let me know by Monday and I will remove the paragraph. They plan to send everything to the letter writers Tuesday.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Angelos D. Keromytis Sent: Friday, June 15, 2018 10:19:36 PM To: Antonakakis, Manos Subject: Re: Revised Statement of Accomplishment

It's a little weird to point to me, but I'm OK. The DARPA Riser mention is good.

> On Jun 15, 2018, at 11:38 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Two more changes. Removing JMS, because he will write a letter (I would like this to appear that came from him directly and not you). Adding a public pointer from Pano's "DARPA Riser" recognition.

>

> It is worth noting that research on this topic is subject of Dr. Antonakakis' ongoing effort on his DoD and DARPA projects. To date, he has had significant practical successes and is on the way of producing a number of publications in the area of attack attribution. However, due to potential national security implications from the results of his research, the publication of the attribution analysis is slower than normal for reasons that Dr. Angelos Keromytis could explain. As a small sign of the impact behind the attribution research conducted by the team Dr. Antonakakis leads, one of his senior Ph.D. students has been recently selected for the very prestigious "DARPA Riser" recognition (https://www.ece.gatech.edu/news/606794/kintis-selected-darpa-riser).

>

> If you do not like the "due to potential national security implications from the results of his research", I can replace it with: "due to the various societal sensitivities surrounding the results of his research" or something along the same lines.

>

> Se zalisa, to xero. Sorry.

> > —

> Manos Antonakakis | manos@gatech.edu

- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >

>

> From: Antonakakis, Manos

- > To: Angelos D. Keromytis
- > Subject: Re: Revised Statement of Accomplishment
- >

> Sent: Friday, June 15, 2018 10:47:53 AM

> A bit cleaner. Let me know what you think.

> It is worth noting that research on this topic is subject of Dr. Antonakakis' ongoing effort on his DoD and DARPA projects. To date, he has had significant practical successes and is on the way of producing a number of publications in the area of attack attribution. However, due to potential national security implications from the results of his research, the publication of the attribution analysis is slower than normal for reasons that Dr. Angelos Keromytis and Dr. Jonathan Smith could explain.

>

>

- > Are you OK with this?
- >
- > —

> Manos Antonakakis | manos@gatech.edu

- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- > _____

> From: Antonakakis, Manos

- > Sent: Friday, June 15, 2018 9:23:25 AM
- > To: Angelos D. Keromytis
- > Subject: Re: Revised Statement of Accomplishment
- >
- > What if I say at the very end the following:
- >

> Research on this topic is subject of your his ongoing DoD and DARPA projects, which has had significant practical successes and is on the way to producing significant publications in the area of attack attribution. Due to potential national security implications, the publication of the attribution analysis is slower than normal for reasons that Dr. Angelos Keromytis and Dr. Jonathan Smith could explain.

>

> Am I going too far with this or no?

- >
- > —
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- >
- > From: Angelos D. Keromytis
- > Sent: Friday, June 15, 2018 8:52 AM
- > To: Antonakakis, Manos
- > Cc: fabian@cs.unc.edu
- > Subject: Re: Revised Statement of Accomplishment
- >
- > Looks good.
- >

>> On Jun 15, 2018, at 8:52 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>>

>> Pleiades was used for two takedowns, yes. I will add them to the document.

>>

>> In the very last paragraph I am feeling that I am already saying too much. Maybe remove it completely (so I will not leave the reader being confused)?

>

>>

- >> Overall not cocky, correct?
- >>
- >> —
- >> Manos Antonakakis | manos@gatech.edu
- >> Georgia Institute of Technology

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, October 11, 2018 6:59:54 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Tejas Patel <tejas@kududyn.com> Subject: Re: Russian Hacking Groups Intersect in Recent Cyberattacks

Ha!

Dr. Angelos D. Keromytis Program Manager DARPA / Information Innovation Office (I2O) 675 N Randolph Street Arlington, VA 22203

(T) 571-218-4290 (NSTS) 918-6691

(NIPR) angelos.keromytis@darpa.mil<mailto:angelos.keromytis@darpa.mil> (SIPR) angelos.keromytis@darpa.smil.mil<mailto:angelos.keromytis@darpa.smil.mil> (JWICS) angelos.keromytis@darpa.ic.gov<mailto:angelos.keromytis@darpa.ic.gov>

On Oct 11, 2018, at 10:37 AM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

hxxxps://xxx.darkreading.com/perimeter/russian-hacking-groups-intersect-in-recent-cyberattacks/d/d-id/1333012

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Monday, June 25, 2018 4:04:11 AM To: Antonakakis, Manos <manos@gatech.edu> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Monday, June 25, 2018 4:04:09 AM Subject: Re: Scott Taylor in the lab Attachments: Nameless.txt (560 Bytes)

From: "Antonakakis, Manos" (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS>
Sent on: Sunday, April 29, 2018 2:52:07 PM
To: Smith, Jonathan <ionathan.smith@darpa.mil>; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> CC:</angelos.keromytis@darpa.mil></ionathan.smith@darpa.mil>
Subject: Re: Send CV as PDF
Attachments: darpa-rising-v2.docx (17.32 KB)
Please find it attached, JMS. I hope Angelos is OK with it too.
is CCed, in case you need anything more from him.
Many thanks!
_
Manos Antonakakis manos@gatech.edu
Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
From: Smith, Jonathan <jonathan.smith@darpa.mil></jonathan.smith@darpa.mil>
Sent: Thursday, April 26, 2018 5:59:24 PM To: Antonakakis, Manos
Subject: Re: Send CV as PDF
Need 1 page abstract from him. See attached.
Need it by Sunday @3PM.
Thanks,
-JMS
On 4/24/18, 5:15 PM, "Antonakakis, Manos" <manos@gatech.edu> wrote:</manos@gatech.edu>
Attached, JMS.
Manos Antonakakis manos@gatech.edu Georgia Institute of Technology
FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
From: Smith, Jonathan <jonathan.smith@darpa.mil> Sent: Tuesday, April 24, 2018 4:44:16 PM</jonathan.smith@darpa.mil>
To: Antonakak <u>is, Ma</u> nos
Subject: Send CV as PDF

-JMS

Jonathan M. Smith, DARPA/I2O T: 703.526.4176, C: 571.481.7228 From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Wednesday, September 5, 2018 2:44:15 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; jim.simpson@cynnovative.com CC: tejas@kududyn.com; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: structured data sharing

Good to have you back. Call me to sync up.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Schneck, Christopher (contr-i2o) < christopher.schneck.ctr@darpa.mil> Sent: Wednesday, September 5, 2018 8:08:10 AM To: Antonakakis, Manos; jim.simpson@cynnovative.com Cc: tejas@kududyn.com; Keromytis, Angelos Subject: RE: structured data sharing

Rgr, understand- just updating all the lines of effort since my return from active duty- thanks!

V/r, Chris Schneck DARPA I2O SETA Office: 571-218-4429 Cell: 571-524-3821

DARPA's 60th Anniversary Symposium Sept 5 - 7, 2018 - Washington, D.C. Join us to explore DARPA's next 60 years - Register now at: https://D60.DARPA.MIL

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Wednesday, September 5, 2018 7:52 AM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; jim.simpson@cynnovative.com Cc: Tejas Patel (tejas@kududyn.com) <tejas@kududyn.com>; Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: structured data sharing

Chris, this is not a priority for GT. We are currently focused on automation, signal qualification and of course the ongoing enrichment of the existing and new cases.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Sent: Wednesday, September 5, 2018 7:44:36 AM To: jim.simpson@cynnovative.com; Antonakakis, Manos Cc: Tejas Patel (tejas@kududyn.com); Keromytis, Angelos Subject: structured data sharing

Jim and Manos,

Can you give me an update on where we are with regards to establishing the ability and process to share a structured data model/graph between performers?

V/r, Chris Schneck DARPA I2O SETA Office: 571-218-4429 Cell: 571-524-3821

DARPA's 60th Anniversary Symposium Sept 5 - 7, 2018 - Washington, D.C. Join us to explore DARPA's next 60 years - Register now at: https://D60.DARPA.MIL From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Sunday, July 29, 2018 4:12:41 PM To: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu>; Chad R. Hunt <chunt@fbi.gov>; William D. II Ware <wdware@fbi.gov> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: Synch Monday (0915-1015) in Klaus bldg at GT

Thanks Michael. One small correction, the room we will meet at (my office) is 3364.

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Farrell, Michael <Michael.Farrell@gtri.gatech.edu> Sent: Sunday, July 29, 2018 11:07:34 AM To: Chad R. Hunt; William D. II Ware Cc: Keromytis, Angelos; Antonakakis, Manos Subject: Synch Monday (0915-1015) in Klaus bldg at GT

Davey — thanks for coming by tomorrow (Monday) morning. Klaus bldg on GT campus (266 Ferst Dr NW), and we will huddle in Manos' office on thrift floor — room 3366.

Chad — I just spoke live with Davey about this and left you a VM on cell. Hopefully you can join the discussion.

Angelos — this is for your benefit to have context on and provide concurrence for continued informal collaboration with Chad, Davey and their team.

Manos — you're fully tracking.

All — will send a calendar invite momentarily. Thanks for the short notice coord.

Best,

—MF

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Friday, September 21, 2018 9:14:43 PM To: Smith, Jonathan <jonathan.smith@darpa.mil> CC: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Lever, Charles C <chazlever@gatech.edu>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu>; Maddern, Thomas (contr-i2o) <Thomas.Maddern.ctr@darpa.mil> Subject: Re: Travel Funds for O'Reilly AI

Many thanks JMS.

Michael, work the details with Chaz.

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Smith, Jonathan <jonathan.smith@darpa.mil> Sent: Friday, September 21, 2018 4:13:18 PM To: Antonakakis, Manos Cc: Keromytis, Angelos; Lever, Charles C; Mitchell, Michael F; Maddern, Thomas (contr-i2o) Subject: Re: Travel Funds for O'Reilly Al

Approved.

-JMS

Jonathan M. Smith, DARPA/I2O T: 703.526.4176, C: 571.481.7228

> On Sep 21, 2018, at 4:09 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> PM team.

>

> I think it would beneficial for my team and the program to send Chaz to the O'Reilly AI conference in London. This is an even that often discuss the latest and equally important practical advances in platforms like Hadoop/Spark. As we will soon be looking into doing unsupervised learning in large datasets, I would like for Chaz to go there and report back to us and other members of the program what are the latest advancements around in ML over the Hadoop stack.

> At this point I should clarify that we are not using Chaz as a world traveler. Due to extensive workload we had on the program he did not flew out to Create to attend RAID --- despite the fact that we asked your permission for it. In other words, this is the only international travel for Chaz this year.

>

> Chaz, if the PM team approves this request, I would like from you to write up a one page report when you come back with the most interesting technologies you saw at the conference. Then, the PM should send this out to the rest of the performers and you should be available to answer any clarification requests from them.

>

> Thanks,

- > > —
- > Manos Antonakakis | manos@gatech.edu
- > Georgia Institute of Technology

> FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, October 9, 2018 2:01:26 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Re: USCC attribution meeting

You are right. Was just trying to speed up the solution to any confusion.

Typos due to mobile device ...

> On Oct 9, 2018, at 08:44, Keromytis, Angelos <angelos.keromytis@darpa.mil> wrote:

>

> While I understand why you said that, think what it does for/to Michael when expressed that way.

>

>> On Oct 9, 2018, at 07:40, Antonakakis, Manos <manos@gatech.edu> wrote:

>>

>> Unless it is classified, I should be the main poc for the GT team on such requests.

>>

>> Manos

>>

>> ----

>> Typos due to mobile device ...

>>

>>> On Oct 9, 2018, at 07:33, Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> wrote:

>>> >>> Michael,

>>>

>>> One of my POC's at USCC reached out about a VTC with GTRI about attribution

>>> and asked me if it pertained to EA. I did not have an answer for him.

>>> Could you give me a summary of what this VTC is about?

>>>

>>> Thanks,

>>>

>>> V/r,

>>>

>>> Chris Schneck

>>> DARPA I2O SETA

>>> 571-524-3821 (cell)

>>> 918-6691

>>>

>>>

```
From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS>
Sent on: Tuesday, October 9, 2018 2:49:12 PM
To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>
CC: Farrell, Michael D < Michael.Farrell@gtri.gatech.edu>; Keromytis, Angelos < angelos.keromytis@darpa.mil>
Subject: Re: USCC attribution meeting
Chris, do not worry buddy. As you very well know by now, Manos ALWAYS delivers. ;)
Typos due to mobile device ...
> On Oct 9, 2018, at 09:46, Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> wrote:
>
> Uh oh- we're in trouble today. I better go find some strong expresso prior
> to the USCC brief
>
> No worries, Michael called and brought me up to speed. I believe everyone
> else is tracking this classified meeting with congressional and USCC
> staffers. It seems to have be floated around USCC and reached the POC's
> that we interact with regularly.
>
> V/r,
>
> Chris Schneck
> DARPA I2O SETA
> 571-524-3821 (cell)
> 918-6691
>
>
> -----Original Message-----
> From: Antonakakis, Manos <manos@gatech.edu>
> Sent: Tuesday, October 9, 2018 9:41 AM
> To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>
> Cc: Farrell, Michael D < Michael.Farrell@gtri.gatech.edu>; Keromytis, Angelos
> <angelos.keromytis@darpa.mil>
> Subject: Re: USCC attribution meeting
>
> Was not my intention to be abrupt (blame the lack of sleep). Was only trying
> to clarify things in the most direct way.
>
> Michael could obviously represent GT both at the classified and unclassified
> levels. He should be, of course, coordinating with DARPA if he is talking
> about our attribution research with others.
>
> Thanks, Manos
>
> ----
> Typos due to mobile device ...
>
>> On Oct 9, 2018, at 07:40, Antonakakis, Manos <manos@gatech.edu> wrote:
>>
>> Unless it is classified, I should be the main poc for the GT team on such
> requests.
>>
```

```
>> Manos
>>
>> ----
>> Typos due to mobile device ...
>>
>>> On Oct 9, 2018, at 07:33, Schneck, Christopher (contr-i2o)
> <christopher.schneck.ctr@darpa.mil> wrote:
>>>
>>> Michael,
>>>
>>> One of my POC's at USCC reached out about a VTC with GTRI about
>>> attribution and asked me if it pertained to EA. I did not have an answer
> for him.
>>> Could you give me a summary of what this VTC is about?
>>>
>>> Thanks,
>>>
>>> V/r,
>>>
>>> Chris Schneck
>>> DARPA I2O SETA
>>> 571-524-3821 (cell)
>>> 918-6691
>>>
>>>
```

From:Keromytis, Angelos<angelos.keromytis@darpa.mil>Sent on:Sunday, October 29, 2017 4:59:28 PMTo:Antonakakis, Manos<manos@gatech.edu>Signed by:KEROMYTIS.ANGELOS.D.1501999799 on Sunday, October 29, 2017 4:59:24 PMSubject:Re: VMware Systems Research Award: Request for Nominations - Due November 3Attachments: Nameless.txt (6.01 KB)

Ack

On Oct 29, 2017, at 12:57, Antonakakis, Manos <<u>manos@gatech.edu</u>> wrote:

FYI- Gents. Thanks for taking time to write the letter for me. What I am pushing here is the reputation system I build back in the day. For its time it was the first dynamic reputation system for Internet DNS infrastracture.

Not sure when/if they will reach out.

Cheers,

Manos Antonakakis | manos@gatech.edu

Georgia Institute of Technology

FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos

Sent: Sunday, October 29, 2017 12:53 PM

To: Beyah, Raheem A

Cc: Romberg, Justin; Howard, Ayanna M

Subject: Re: VMware Systems Research Award: Request for Nominations - Due November 3

Hey Raheem,

You need the following from me:

1) A proposed citation of at most 20 words

- Antonakakis, Perdisci, Dagon, Lee and Feamster. "Building a Dynamic Reputation System for DNS", In the 19th USENIX Security Symposium.

2) Contact information for three references:

- Dr. Fabian Monrose, Kenan Distinguished Professor in the Computer Science department at the University of North Carolina at Chapel Hill, <u>fabian@cs.unc.edu</u>

- Dr. Angelos Keromytis, DARPA Manager and Associate Professor Department of Computer Science, Columbia University, New York, <u>angelos.keromytis@darpa.mil</u>

- Dr. Roberto Perdisci, Associate Professor, Department of Computer Science, University of Georgia, <u>perdisci@cs.uga.edu</u>

3) A one-page summary statement concerning the originality, impact, and future potential of the nominee's research.

- Attached.

Please let me know if you need anything more.

Cheers,

Manos Antonakakis | manos@gatech.edu

Georgia Institute of Technology

FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Beyah, Raheem A

Sent: Friday, October 27, 2017 4:26:14 PM

To: Antonakakis, Manos

Cc: Romberg, Justin; Howard, Ayanna M

Subject: Re: VMware Systems Research Award: Request for Nominations - Due November 3

Yup. Thx.

On Oct 25, 2017, at 10:25 PM, Antonakakis, Manos <<u>manos@gatech.edu</u>< <u>mailto:manos@gatech.edu</u>>> wrote:

Happy to apply Raheem. I should be able to have everything ready before I fly out for CCS on

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Saturday, February 3, 2018 6:42:22 PM To: Manos Antonakakis <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Saturday, February 3, 2018 6:42:22 PM Subject: Realtor Attachments: Nameless.txt (32 Bytes) From: Manos Antonakakis <manos@gatech.edu> Sent on: Wednesday, August 29, 2018 5:12:01 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Smith, Jonathan <jonathan.smith@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> CC: Farrell, Michael D <Michael.Farrell@gtri.gatech.edu> Subject: Regarding D60

Gents,

Unfortunately I will have to cancel my trip to DC for the D60 event. will have to go under some dental work that requires sedation and someone needs to be there to help her out when she is done.

Since Micheal will be there from our team, I decided to cancel my trip. This also helps me with the EA backlog in EA --- few more days that might help me catch up with a few cases and the development of more automatic processes (look for an update on this very soon).

This is a heads up.

Thanks,

--

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, August 2, 2018 9:07:25 PM To: Hook, Lisa <lisa.hook@team.neustar>; Joffe, Rodney <Rodney.Joffe@team.neustar> CC: Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: Regarding HACCS

Hey Lisa,

I would like to reiterate that I take full responsibility for the HACCS delay. The ECP (contract modification) between GT and DARPA takes time we are in the process of finalize this modification. At the same time, I would like to have Angelos relay the status of everything we are doing (HACCS and EA) in person --- especially if Charlie is available for a meeting. My understanding is that Angelos would be more than happy to swing by your offices.

Many thanks,

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, October 11, 2018 3:37:56 PM To: Smith, Jonathan <Jonathan.smith@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil> CC: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Tejas Patel <tejas@kududyn.com> Subject: Russian Hacking Groups Intersect in Recent Cyberattacks

One more reason to attend the EA site review meetings. You learn things sooner than reading the news.

https://www.darkreading.com/perimeter/russian-hacking-groups-intersect-in-recent-cyberattacks/d/d-id/1333012

(Manos is not perfect, but darn close to it.) ;)

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Monday, June 25, 2018 4:04:20 AM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>

CC: Smith, Jonathan <jonathan.smith@darpa.mil>; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: Scott Taylor in the lab

Chris, Scott Taylor from FM arrived in my lab Friday. He will be here for the next month. He wants to help so he asked to read everything we have done, and start working on the open cases we have.

Do I have the green light to:1) Share past reports with him?2) Use him as an analyst in my cases?

Thanks,

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Monday, August 14, 2017 12:34:54 AM To: Patel, Tejas H CTR (US) <tejas.patel.ctr@darpa.mil>; Keromytis, Angelos D CIV DARPA (US) <angelos.keromytis@darpa.mil> Subject: Slides for tomorrow Attachments: Antonakakis_DoJ-EA_08142017.pptx (9.03 MB)

Gents,

I am planning to use these slides and open the report to discuss any details. If I knew what they will ask, I can create slides just to answer those questions.

See you tomorrow.

Cheers,

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Thursday, November 1, 2018 2:01:54 PM To: Smith, Jonathan <Jonathan.smith@darpa.mil>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Tejas Patel <tejas@kududyn.com> Subject: Stuxnet like malware

https://www.reuters.com/article/us-iran-khamenei/irans-khamenei-calls-for-fight-against-enemy-infiltrationidUSKCN1N20CN

"Gholamreza Jalali, head of Iran's civil defense agency, said on Sunday that Iran had recently neutralized a new version of Stuxnet.

"Recently we discovered a new generation of Stuxnet which consisted of several parts ... and was trying to enter our systems," Jalali was quoted as saying by the semi-official ISNA news agency at a news conference marking Iran's civil defense day. He did not give further details."

Effectively the same story here:

https://www.timesofisrael.com/tv-report-israel-silent-as-iran-hit-by-computer-virus-more-violent-than-stuxnet/

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, September 1, 2017 2:27:12 PM To: Manos Antonakakis <manos@gatech.edu>; mikef@kududyn.com Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, September 1, 2017 2:27:08 PM Subject: Target IP timeline.v2 (8.30.2017).xlsx Attachments: Nameless.txt (73 Bytes), Target IP timeline.v2 (8.30.2017).xlsx (23 KB), Nameless.txt (4 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Friday, September 1, 2017 2:27:17 PM To: mikef@kududyn.com; Manos Antonakakis <manos@gatech.edu> Signed by: KEROMYTIS.ANGELOS.D.1501999799 on Friday, September 1, 2017 2:27:15 PM Subject: Target IP timeline.v3 (8.31.2017).xlsx Attachments: Nameless.txt (56 Bytes), Target IP timeline.v3 (8.31.2017).xlsx (23 KB), Nameless.txt (4 Bytes) From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Sunday, August 27, 2017 1:31:22 AM To: Manos Antonakakis <manos@gatech.edu>; mikef@kududyn.com; Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil> Subject: Target IP timeline.xlsx Attachments: Target IP timeline.xlsx (21.5 KB), ATT00001.txt (2 Bytes)

Pass separately.

From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, October 30, 2018 9:11:14 PM

To: Tejas Patel <tejas@kududyn.com>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>

CC: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Smith, Jonathan <Jonathan.smith@darpa.mil> Subject: The night of the Hackathon

Folks,

What do you want me to prepare for the first night of the hackathon (Nov 14th)? Do you want me to get the big room at Kyma or we should let everybody do their own thing?

Thanks,

From: Aldenberg, William B. (NH) (FBI)<wbaldenberg@fbi.gov>
Sent on: Thursday, February 11, 2021 1:13:02 AM
To: Keromytis, Angelos D<angelos@gatech.edu>
Subject: Re: [EXTERNAL EMAIL] - Re: DARPA

Angelos

I will forward it to you shortly. Thank you again for your time.

Bill

-

On Feb 10, 2021 6:36 PM, "Keromytis, Angelos D" <angelos@gatech.edu> wrote: Bill, I haven't yet received any VTC info for tomorrow. -Angelos

On Feb 4, 2021, at 20:11, Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov> wrote:

Yes. Thank you. We will call you at 1300.

-

On Feb 4, 2021 8:08 PM, "Keromytis, Angelos D" <angelos@gatech.edu> wrote:

Bill, does 1300 Eastern tomorrow work? Best, -Angelos

On Feb 4, 2021, at 18:50, Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov> wrote:

Angelos

I have copied Andrew DeFilippis the AUSA handling this matter. We would like to have a short call with you tomorrow to give you a general overview of what we would like to discuss next Thursday. Please let us know if you have time and we will give you a call. Shouldn't be more than 10 minutes.

Thank you,

Bill - On Feb 4, 2021 4:43 PM, "Keromytis, Angelos D" <angelos@gatech.edu> wrote:

Bill,

Per our quick call: I can make myself available for an unclassified call with the assistant attorney(s) next Thursday, 1300-1400 Eastern. Please send me VTC information.

Since (as you also mentioned in your original email, below) you are treating me as a (possible) witness to a matter, I will be attending by myself.

As discussed, it would be helpful to know the general topic(s)/area(s) for discussion, so I can confirm with the DARPA GC what I can speak to wrt proprietary sensitivities -- some contracting matters are DARPA-internal, and there are also some constraints on what I can say about contracts that I was managing that fall under 18 USC. (See attached documents. I don't expect what we'll discuss will fall under these provisions, but do keep it in mind because I will be.)

Thanks, -Angelos

> On Feb 4, 2021, at 2:57 PM, Aldenberg, William B. (NH) (FBI)<wbaldenberg@fbi.gov> wrote:

> Dr. Keromytis

>

>

> My name is Special Agent Bill Aldenberg with the FBI. I am currently assigned to the Special Counsels office. We would like to speak with you regarding your time at DARPA. You are possibly a witness to a matter we are investigating. Please give me a call when you have a moment. My cell # is 203-868-7487 and my desk number is 203-503-5200. The main # for my office is 203-503-5000.

>

> Kate Wasch from your General Counsel's office was notified that we were going to reach out to you.

>

> Thank you and we look forward to speaking with you.

>

> Bill Aldenberg

> FBI – New Haven

From: "Keromytis, Angelos D" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8F339093DC3C4BC7B981913B18F6BCFB-KEROMYTIS_A>

Sent on: Friday, February 12, 2021 1:38:36 AM

- To: Aldenberg, William B. (NH) (FBI)<wbaldenberg@fbi.gov>
- CC: Aldenberg, William (JMD)<William.Aldenberg@usdoj.gov>; DeFilippis, Andrew (JMD)<Andrew.DeFilippis2@usdoj.gov>

Subject: Re: [EXTERNAL EMAIL] - Re: Interview with Angelos Keromytis

No problem, feel free to reach out if I can help with anything else.

On Feb 11, 2021, at 19:15, Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov> wrote:

Angelos

Thank you for the information and taking the time to speak with us today.

Bill

-

On Feb 11, 2021 3:41 PM, "Keromytis, Angelos D" <angelos@gatech.edu> wrote: In case these help, since you asked related questions:

- First time I met Dave Dagon (that I have a record for) is on November 2015, at DARPA. Probably some emails prior/leading up to that, as I was doing the planning for the EA program (what datasets exist, what is technical possible/plausible, etc.)

- First time I met Rodney Joffe (again, that I have a record for) is on April 2016; intent was to find out about what data Neustar has/had that might be helpful to the program. Had a couple of follow-ons (not sure if meetings or phone calls) in June.

- First discussion with FBI (NCIJTF) about EA around February 2016. (We had prior interactions, going back to March 2015, about a different program.)

- First discussion with NSD/DoJ about EA ~December 2015 (although maybe also October 2015).

(These are from my calendar, so I have limited context.) -Angelos

> On Feb 10, 2021, at 8:15 PM, Aldenberg, William (JMD) <William.Aldenberg@usdoj.gov> wrote:

- >
- > Angelos

>

> The meeting info is below.

the risk for all parties involved can be identified, we should then loop in legal or anyone else necessary to start writing things down in a MoU.

Gentlemen, as I have said before, this is a research area Angelos and I created. We cannot simply walk away from it.

Thanks, Manos

From: "Nie, Ling-Ling" <linglingnie@gatech.edu> Date: Saturday, July 24, 2021 at 11:32 AM

To: "Antonakakis, Manos" <manos@gatech.edu>, "McLaughlin, Steven W"

<swm@gatech.edu>, "Abdallah, Chaouki T" <ctabdallah@gatech.edu>

Subject: Re: FGJ Subpoena for Manos Antonakakis

Hi Manos: Thank you for your thoughtful email. I know these last few weeks have been a whirlwind. I will ask my assistant to reach out on Monday to schedule time for all of us to talk further. Ling-Ling

From: Antonakakis, Manos <manos@gatech.edu>

Sent: Saturday, July 24, 2021 10:50 AM

To: McLaughlin, Steven W; Abdallah, Chaouki T; Nie, Ling-Ling

Subject: Re: FGJ Subpoena for Manos Antonakakis

Hey Steve, Chaouki and Ling-Ling,

Hope you are doing great.

I have not been bothering you about this because I have been told by Christian (who is an absolute Rock star!) that Ling-Ling (or someone in her team) has been communicating to you what is going on with this situation.

This email is not about me explaining to you that I have done nothing wrong. I suspect that now that Christian has all the information he needs he can independently arrive at that conclusion and communicate what needs to be communicated to you.

This email is about the key question, "And now what?"

From where I stand, and for the first time in my life I felt that I am being investigated by law enforcement because of my ideas and the work I have done for the USG/DoD. For the first time since the moment I landed in Dulles international airport on October 1st of 2004, I had a serious discussion with my wife about moving back to Greece. Most importantly, however, I brought unnecessary attention from the DoJ in my working environment. This besides potentially hurting my reputation within GT (even if it is from an optics point of view) it also personally disappoints me greatly, because as a GT PhD student (2006-2012) and now as a faculty (2014-now) I always had as a goal to bring good news, recognition and success to GT --- and certainly not the attention of a special council. If I make an attempt to come in your shoes, it would be absolutely reasonable for all of you to have questions about the risk that my research (and perhaps even myself) could bring to the Institute in the future. Therefore, when the dust settles I would like to have a discussion with all of you about the following two key open questions:

- First and foremost, how do you feel about my actions now that GT legal has a plethora of my emails and after I spent countless hours explaining to everyone why I did what I did at the time I did it? If you think I did something unethical (not necessarily illegal) I will work with GT to smoothly (see running projects, students, SOW deliverables, etc.) or otherwise transition out. You have my word on this.
- 2. Big data analysis and machine learning for attack attribution is the future. After all these events with this politically driven inquisition, I need to see if there is a place where I can keep working on this research space that I invented over the last 5 years through my work in EA. What I would like to know is how GT upper management and legal feels about my line of research after all these events? Is GT a place that would welcome more innovation in this space, or this is simply not your (read is as GT's) cup of tea anymore?

Finally, I will leave you with an anecdote and a thought. During one of my interviews with the Special Counsel prosecutor, I was asked point blank by Mr. DeFilippis, "Do you believe that DARPA should be instructing you to investigate the origins of a hacker (Guccifer_2.0) that hacked a political entity (DNC)?" Let that sync for a moment, folks. Someone hacked a political party (DNC, in this case), in the middle of an election year (2016), and the lead investigator of DoJ's special council would question whether US researchers working for DARPA should conduct investigations in this matter is

"acceptable"! While I was tempted to say back to him "What if this hacker hacked GOP? Would you want me to investigate him then?", I kept my cool and I told him that this is a question for DARPA's director, and not for me to answer.

Steve, Chaouki and Ling-Ling; please, try to imagine a "United States of America" where investigations and prosecutions are determined by ideas and political believes. This has been tried before in human history and the results of it was forced labor and Gulags.

Folks, I strongly believe we will need this type of research and much more innovation in this space to preserve our democracy. This is factually true for a single yet fundamental reason: data driven scientific attribution is unbiased politically. Data belongs to no political party. Our nation's adversaries will keep attacking our country --- I am certain of this because their attacks simply work and are tremendously impactful to our society.

Thank you and have a great weekend.

PS. I am writing this email on a weekend because this is my first downtime since July 2nd when I received the subpoena.

Thanks, Manos

From: "Nie, Ling-Ling" <linglingnie@gatech.edu> Date: Friday, July 2, 2021 at 7:50 PM

To: "Antonakakis, Manos" <manos@gatech.edu>, "McLaughlin, Steven W"

<swm@gatech.edu>, "Abdallah, Chaouki T" <ctabdallah@gatech.edu>, "Wasch, Kate"

<kate.wasch@legal.gatech.edu>, "Lunon, Darryl" <dl91@gatech.edu>

Subject: Re: FGJ Subpoena for Manos Antonakakis

Hi Manos: Thanks for forwarding. I'm copying Kate's correct email address and adding Darryl. We will confer internally and come back to you early next week as there are some people who are out of the office for the holiday weekend that we will need to loop in.

From: Antonakakis, Manos <manos@gatech.edu>

Sent: Friday, July 2, 2021 2:39 PM

To: McLaughlin, Steven W; Abdallah, Chaouki T; kate.wesch@legal.gatech.edu; Nie, Ling-Ling Subject: Fw: FGJ Subpoena for Manos Antonakakis

Hey Steve/Chaouki/Kate/Ling-Ling,

Hope you are doing great! Evidently I need to appear in front of a Grand Jury on July 15th. Any idea if I should talk with GT counsel before or if anyone from GT should be with me in this testimony?

This is a first for me so I am not sure what to do next.

Thanks, Manos

From: Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov> Sent: Friday, July 2, 2021 4:28 PM To: Antonakakis, Manos Cc: kate.wesch@legal.gatech.edu; Fuhrman, Tim (JMD) Subject: FGJ Subpoena for Manos Antonakakis

Dear Mr. Antonakakis - This is Jack Eckenrode, an Investigator with the US Justice Department. Together with my colleague Tim Fuhrman, copied here, with whom you may have had previous contact, we are attaching a federal grand jury subpoena seeking your testimony in Washington, DC on July 15, 2021 at 1:00pm. You should feel free to contact either one of us in the event that you have any questions related to the subpoena or your appearance.

Also copied for her awareness is Kate Wasch, legal counsel from Georgia Tech.

within GT (even if it is from an optics point of view) it also personally disappoints me greatly, because as a GT PhD student (2006-2012) and now as a faculty (2014-now) I always had as a goal to bring good news, recognition and success to GT --- and certainly not the attention of a special council. If I make an attempt to come in your shoes, it would be absolutely reasonable for all of you to have questions about the risk that my research (and perhaps even myself) could bring to the Institute in the future. Therefore, when the dust settles I would like to have a discussion with all of you about the following two key open questions:

- First and foremost, how do you feel about my actions now that GT legal has a plethora of my emails and after I spent countless hours explaining to everyone why I did what I did at the time I did it? If you think I did something unethical (not necessarily illegal) I will work with GT to smoothly (see running projects, students, SOW deliverables, etc.) or otherwise transition out. You have my word on this.
- 2. Big data analysis and machine learning for attack attribution is the future. After all these events with this politically driven inquisition, I need to see if there is a place where I can keep working on this research space that I invented over the last 5 years through my work in EA. What I would like to know is how GT upper management and legal feels about my line of research after all these events? Is GT a place that would welcome more innovation in this space, or this is simply not your (read is as GT's) cup of tea anymore?

Finally, I will leave you with an anecdote and a thought. During one of my interviews with the Special Counsel prosecutor, I was asked point blank by Mr. DeFilippis, "Do you believe that DARPA should be instructing you to investigate the origins of a hacker (Guccifer_2.0) that hacked a political entity (DNC)?" Let that sync for a moment, folks. Someone hacked a political party (DNC, in this case), in the middle of an election year (2016), and the lead investigator of DoJ's special council would question whether US researchers working for DARPA should conduct investigations in this matter is "acceptable"! While I was tempted to say back to him "What if this hacker hacked GOP? Would you want me to investigate him then?", I kept my cool and I told him that this is a question for DARPA's director, and not for me to answer.

Steve, Chaouki and Ling-Ling; please, try to imagine a "United States of America" where investigations and prosecutions are determined by ideas and political believes. This has been tried before in human history and the results of it was forced labor and Gulags.

Folks, I strongly believe we will need this type of research and much more innovation in this space to preserve our democracy. This is factually true for a single yet fundamental reason: data driven scientific attribution is unbiased politically. Data belongs to no political party. Our nation's adversaries will keep attacking our country --- I am certain of this because their attacks simply work and are tremendously impactful to our society.

Thank you and have a great weekend.

PS. I am writing this email on a weekend because this is my first downtime since July 2nd when I received the subpoena.

Thanks, Manos

From: "Nie, Ling-Ling" <linglingnie@gatech.edu>

Date: Friday, July 2, 2021 at 7:50 PM

To: "Antonakakis, Manos" <manos@gatech.edu>, "McLaughlin, Steven W"

<swm@gatech.edu>, "Abdallah, Chaouki T" <ctabdallah@gatech.edu>, "Wasch, Kate"

<kate.wasch@legal.gatech.edu>, "Lunon, Darryl" <dl91@gatech.edu>

Subject: Re: FGJ Subpoena for Manos Antonakakis

Hi Manos: Thanks for forwarding. I'm copying Kate's correct email address and adding Darryl. We will confer internally and come back to you early next week as there are some people who are out of the office for the holiday weekend that we will need to loop in.

From: Antonakakis, Manos <manos@gatech.edu>

Sent: Friday, July 2, 2021 2:39 PM

To: McLaughlin, Steven W; Abdallah, Chaouki T; kate.wesch@legal.gatech.edu; Nie, Ling-Ling **Subject:** Fw: FGJ Subpoena for Manos Antonakakis

Hey Steve/Chaouki/Kate/Ling-Ling,

This email is about the key question, "And now what?"

From where I stand, and for the first time in my life I felt that I am being investigated by law enforcement because of my ideas and the work I have done for the USG/DoD. For the first time since the moment I landed in Dulles international airport on October 1st of 2004, I had a serious discussion with my wife about moving back to Greece. Most importantly, however, I brought unnecessary attention from the DoJ in my working environment. This besides potentially hurting my reputation within GT (even if it is from an optics point of view) it also personally disappoints me greatly, because as a GT PhD student (2006-2012) and now as a faculty (2014-now) I always had as a goal to bring good news, recognition and success to GT --- and certainly not the attention of a special council. If I make an attempt to come in your shoes, it would be absolutely reasonable for all of you to have questions about the risk that my research (and perhaps even myself) could bring to the Institute in the future. Therefore, when the dust settles I would like to have a discussion with all of you about the following two key open questions:

- First and foremost, how do you feel about my actions now that GT legal has a plethora of my emails and after I spent countless hours explaining to everyone why I did what I did at the time I did it? If you think I did something unethical (not necessarily illegal) I will work with GT to smoothly (see running projects, students, SOW deliverables, etc.) or otherwise transition out. You have my word on this.
- 2. Big data analysis and machine learning for attack attribution is the future. After all these events with this politically driven inquisition, I need to see if there is a place where I can keep working on this research space that I invented over the last 5 years through my work in EA. What I would like to know is how GT upper management and legal feels about my line of research after all these events? Is GT a place that would welcome more innovation in this space, or this is simply not your (read is as GT's) cup of tea anymore?

Finally, I will leave you with an anecdote and a thought. During one of my interviews with the Special Counsel prosecutor, I was asked point blank by Mr. DeFilippis, "Do you believe that DARPA should be instructing you to investigate the origins of a hacker (Guccifer_2.0) that hacked a political entity (DNC)?" Let that sync for a moment, folks. Someone hacked a political party (DNC, in this case), in the middle of an election year (2016), and the lead investigator of DoJ's special council would question whether US researchers working for DARPA should conduct investigations in this matter is "acceptable"! While I was tempted to say back to him "What if this hacker hacked GOP? Would you want me to investigate him then?", I kept my cool and I told him that this is a question for DARPA's director, and not for me to answer.

Steve, Chaouki and Ling-Ling; please, try to imagine a "United States of America" where investigations and prosecutions are determined by ideas and political believes. This has been tried before in human history and the results of it was forced labor and Gulags.

Folks, I strongly believe we will need this type of research and much more innovation in this space to preserve our democracy. This is factually true for a single yet fundamental reason: data driven scientific attribution is unbiased politically. Data belongs to no political party. Our nation's adversaries will keep attacking our country --- I am certain of this because their attacks simply work and are tremendously impactful to our society.

Thank you and have a great weekend.

PS. I am writing this email on a weekend because this is my first downtime since July 2nd when I received the subpoena.

Thanks, Manos

From: "Nie, Ling-Ling" <linglingnie@gatech.edu> Date: Friday, July 2, 2021 at 7:50 PM

To: "Antonakakis, Manos" <manos@gatech.edu>, "McLaughlin, Steven W" <swm@gatech.edu>, "Abdallah, Chaouki T" <ctabdallah@gatech.edu>, "Wasch, Kate" <kate.wasch@legal.gatech.edu>, "Lunon, Darryl" <dl91@gatech.edu>

Subject: Re: FGJ Subpoena for Manos Antonakakis

Hi Manos: Thanks for forwarding. I'm copying Kate's correct email address and adding Darryl. We will confer internally and come back to you early next week as there are some people who are out of the office for the holiday weekend that we will need to loop in.

From:	Keromytis, Angelos D <angelos@gatech.edu></angelos@gatech.edu>
Sent on:	Thursday, February 4, 2021 9:43:02 PM
To:	Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov></wbaldenberg@fbi.gov>
CC:	Aldenberg, William (JMD) <william.aldenberg@usdoj.gov></william.aldenberg@usdoj.gov>
Subject:	Re: DARPA
Attachments	: Keromytis - Post-Gov't Employment Brief Certpdf (711.78 KB), Post-government Employment Info Letter (2018 Sep 26).pdf (313.62 KB)

Bill,

Per our quick call: I can make myself available for an unclassified call with the assistant attorney(s) next Thursday, 1300-1400 Eastern. Please send me VTC information.

Since (as you also mentioned in your original email, below) you are treating me as a (possible) witness to a matter, I will be attending by myself.

As discussed, it would be helpful to know the general topic(s)/area(s) for discussion, so I can confirm with the DARPA GC what I can speak to wrt proprietary sensitivities -- some contracting matters are DARPA-internal, and there are also some constraints on what I can say about contracts that I was managing that fall under 18 USC. (See attached documents. I don't expect what we'll discuss will fall under these provisions, but do keep it in mind because I will be.)

Thanks, -Angelos

> On Feb 4, 2021, at 2:57 PM, Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov> wrote:

>

> Dr. Keromytis

>

> My name is Special Agent Bill Aldenberg with the FBI. I am currently assigned to the Special Counsels office. We would like to speak with you regarding your time at DARPA. You are possibly a witness to a matter we are investigating. Please give me a call when you have a moment. My cell # is 203-868-7487 and my desk number is 203-503-5200. The main # for my office is 203-503-5000.

>

> Kate Wasch from your General Counsel's office was notified that we were going to reach out to you.

>

> Thank you and we look forward to speaking with you.

>

> Bill Aldenberg

> FBI – New Haven

From: McConnell, Kirk (Armed Services)<Kirk_McConnell@armed-services.senate.gov> Sent on: Saturday, June 29, 2019 4:31:36 AM

To: Antonakakis, Manos<manos@gatech.edu>; Rodney Joffe<Rodney.Joffe@neustar.biz>; Joffe Rodney<rjoffe@packetforensics.com>

Subject: Fwd: connection for briefing on Enhanced Attribution

Well, Michael is quite a guy isn't he?

Sent from my iPhone Begin forwarded message:

From: "Farrell, Michael" <<u>michael.farrell@iisp.gatech.edu</u>>
Date: June 28, 2019 at 4:41:00 PM EDT
To: "McConnell, Kirk (Armed Services)" <<u>Kirk_McConnell@armed-services.senate.gov</u>>
Cc: lan Crone <<u>ian.crone@darpa.mil</u>>, "<u>lisa.heyes@darpa.mil</u>" <<u>lisa.heyes@darpa.mil</u>>
Subject: Re: connection for briefing on Enhanced Attribution

Kirk,

Thanks for your interest in Georgia Tech research. However, we (GT) have no comment or position on the below. In fact, going forward please contact DARPA directly about any and all issues or questions or comments related to the enhanced attribution program. The DARPA congressional liaison and program manager are copied on this message and can respond, as needed. The Georgia Tech/GTRI PI and Co-PIs on this research program are not the appropriate POCs for any questions, comments, or concerns.

The government, not GT, makes decisions related to funding and transition from research at DARPA to other entities. The focus of Manos, myself and other Co-PIs is completely on doing impactful research. We follow contractual requirements and relevant policies for our part of this program (and GT is only one part), and devote our energy to 'creating the next' in cyber security.

Best,

Michael

On Jun 25, 2019, at 12:24, McConnell, Kirk (Armed Services) <<u>Kirk McConnell@armed-</u> services.senate.gov> wrote:

FYI. Andy is on the SAC-D staff. Andrew Pahutski from SCO is seeking approval from us on the Hill to shift some SCO money to Enhanced Attribution.

From: McConnell, Kirk (Armed Services)
Sent: Tuesday, June 25, 2019 12:22 PM
To: Heyes, Lisa (<u>lisa.heyes@darpa.mil</u>) <<u>lisa.heyes@darpa.mil</u>>; Vanlandingham, Andy (Appropriations) <<u>Andy_Vanlandingham@appro.senate.gov</u>>
Subject: connection for briefing on Enhanced Attribution
Lisa –
Andy Vanlandingham is interested in learning more about DARPA's Enhanced

Attribution cybersecurity program. It turns out that a current SCO program manager whom we know well is moving over to Cyber Command to help with the transition of this DARPA program to CYBERCOM. Thanks, Kirk

From: McConnell, Kirk (Armed Services)<Kirk_McConnell@armed-services.senate.gov> Sent on: Saturday, June 29, 2019 2:17:29 PM

To: Rodney Joffe<rjoffe@centergate.com>

CC: Antonakakis, Manos<manos@gatech.edu>

Subject: Re: connection for briefing on Enhanced Attribution

I believe that Farrell would rather see the program die than work with Congress.

Sent from my iPhone On Jun 29, 2019, at 12:39 AM, Rodney Joffe <<u>rjoffe@centergate.com</u>> wrote:

Jeez

What a piece of work! Glad you don't have any influence with DARPA's budget that Michael relies on.

Manos?

On Jun 29, 2019, at 12:31 AM, McConnell, Kirk (Armed Services) <<u>Kirk McConnell@armed-</u> services.senate.gov> wrote:

Well, Michael is quite a guy isn't he?

Sent from my iPhone Begin forwarded message:

> From: "Farrell, Michael" <<u>michael.farrell@iisp.gatech.edu</u>> Date: June 28, 2019 at 4:41:00 PM EDT To: "McConnell, Kirk (Armed Services)" < Kirk McConnell@armed-services.senate.gov> Cc: lan Crone <<u>ian.crone@darpa.mil</u>>, "<u>lisa.heyes@darpa.mil</u>" <<u>lisa.heyes@darpa.mil</u>> Subject: Re: connection for briefing on Enhanced Attribution

Kirk,

Thanks for your interest in Georgia Tech research. However, we (GT) have no comment or position on the below. In fact, going forward please contact DARPA directly about any and all issues or questions or comments related to the enhanced attribution program. The DARPA congressional liaison and program manager are copied on this message and can respond, as needed. The Georgia Tech/GTRI PI and Co-PIs on this research program are not the appropriate POCs for any questions, comments, or concerns.

The government, not GT, makes decisions related to funding

and transition from research at DARPA to other entities. The focus of Manos, myself and other Co-PIs is completely on doing impactful research. We follow contractual requirements and relevant policies for our part of this program (and GT is only one part), and devote our energy to 'creating the next' in cyber security.

Best,

Michael

On Jun 25, 2019, at 12:24, McConnell, Kirk (Armed Services) < <u>Kirk McConnell@armed-services.senate.gov</u>> wrote:

> FYI. Andy is on the SAC-D staff. Andrew Pahutski from SCO is seeking approval from us on the Hill to shift some SCO money to Enhanced Attribution.

From: McConnell, Kirk (Armed Services) Sent: Tuesday, June 25, 2019 12:22 PM To: Heyes, Lisa (<u>lisa.heyes@darpa.mil</u>) < <u>lisa.heyes@darpa.mil</u>>; Vanlandingham, Andy (Appropriations) < Andy Vanlandingham@appro.senate.gov> Subject: connection for briefing on Enhanced

Subject: connection for briefing on Enhanced Attribution

Lisa –

Andy Vanlandingham is interested in learning more about DARPA's Enhanced Attribution cybersecurity program. It turns out that a current SCO program manager whom we know well is moving over to Cyber Command to help with the transition of this DARPA program to CYBERCOM. Thanks, Kirk From: Lily Kim <Lily.Kim@microsoft.com> Sent: Tuesday, July 30, 2019 10:16 PM To: Antonakakis, Manos <manos@gatech.edu>; Rodney Joffe <rjoffe@packetforensics.com>; Ashfia Rahman <asrahma@microsoft.com>; William Chappell <William.Chappell@microsoft.com> Cc: McConnell, Kirk (Armed Services) <Kirk_McConnell@armed-services.senate.gov>; Victor Oppleman <victor@packetforensics.com>; Christian Cook <Christian.Cook@microsoft.com>; Lisa Patel <lpatel@centergate.com> Subject: RE: introduction

Hi Manos,

I believe I can make Friday work D. @Ashfia Rahman- can you please help with scheduling? We can start w/ 30 min.

@William Chappell- would be good for you to attend as well if you are free.

Thanks team!

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Tuesday, July 30, 2019 9:17 PM To: Rodney Joffe <rjoffe@packetforensics.com>; Lily Kim <Lily.Kim@microsoft.com> Cc: Kirk McConnell <Kirk_McConnell@armed-services.senate.gov>; Victor Oppleman <victor@packetforensics.com>; Ashfia Rahman <asrahma@microsoft.com>; Christian Cook <Christian.Cook@microsoft.com>; Lisa Patel <lpatel@centergate.com> Subject: Re: introduction

Kirk, thanks for the intros.

Lily, pleased to meet you!

This Friday works for me. The week after the next I will be hosting a hackathon at GT for DARPA, so my schedule will be less flexible. If you come up with a date, I will try to make it work but I cannot promise that I will be able to.

Many thanks,

Manos Antonakakis | Associate Professor | manos@gatech.edu School of Electrical and Computer Engineering Georgia Institute of Technology FF7D 4FDF 9115 8077 92D25B59 5120 5E89 BE1B 3668

TIME DETAIL FOR MATTER 2 / Grand Jury Subpoena:

<u>Date</u> 07/09/21	<u>Timekeeper</u> Schamel, Mark	<u>Hours</u> 0.60	<u>Time Narrative</u> Telephone calls and emails with general counsel of Georgia Tech
07/10/21	Schamel, Mark	1.30	Telephone calls and emails with client and general counsel of Georgia Tech
07/12/21	Jara, Ana L.	0.30	Confer with AUSA re: whether client was subject, target, or witness; confer with M. Schamel re: same
07/12/21	Schamel, Mark	0.80	Telephone call with prosecutor; email with client re: same; confer with A. Jara re: AUSA
07/13/21	Jara, Ana L.	1.00	Confer with general counsel of Georgia Tech re: government attempting in-person service on client and follow up with government re: same; attend call with M. Schamel and AUSAs re: substance of the grand jury subpoena and possibility of client speaking in information interview re: same
07/13/21	Schamel, Mark	1.00	Telephone call with A. Jara and AUSA re: subpoena and interview with client; multiple emails re: same
07/14/21	Jara, Ana L.	2.50	Confer with client re: facts underlying the grand jury subpoena and take notes re: same; confer with general counsel for Georgia Tech to discuss the issues related to the subpoena, DARPA, and what George Tech could do to help; confer with M. Schamel re: same; review emails from client re: facts underlying the grand jury subpoena; confirm receipt of same
07/14/21	Schamel, Mark	1.90	Confer with client re: facts underlying the grand jury subpoena; confer with general counsel for Georgia Tech to discuss the issues related to the subpoena, DARPA, and what George Tech could do to help; confer with A. Jara re: same
07/15/21	Jara, Ana L.	1.50	Confer with client re: interview with government and confidentiality concerns; confer with M. Schamel re: same; confer with general counsel at George Tech re: same
07/15/21	Schamel, Mark	2.20	Multiple telephone calls with client; telephone calls with AUSA; telephone calls with general counsel at George Tech
07/16/21	Jara, Ana L.	4.30	Attend informal meeting with government to go over what client knows re: case; confer with client and M. Schamel after meeting; confer with M. Schamel and general counsel for George Tech re: same
07/16/21	Schamel, Mark	4.70	Attend informal meeting with government to go over what client knows re: case; confer with client and A. Jara after meeting; confer with A. Jara and general counsel for George Tech re: same
07/19/21	Jara, Ana L.	2.30	Attend, and participate in telephone call with client re: refreshing recollection for government interviews; confer with government and M. Schamel re: same; confer with client to update him on calls with government
07/19/21	Schamel, Mark	1.80	Telephone call with A. Jara; email with prosecutor; telephone call with client
07/20/21	Jara, Ana L.	0.70	Confer with M. Schamel and client re: document productions and refreshing his recollection; confer with M. Schamel re: same

TIME DETAIL FOR MATTER 3 / Subpoena:

<u>Date</u> 01/07/22	<u>Timekeeper</u> Schamel, Mark	Hours N/C	<u>Time Narrative</u> Email with S. Tyrrell re: his representation of R. Joffe and scheduling a meeting (.1) NO CHARGE
01/10/22	Schamel, Mark	0.10	Email with M. McIntosh re: proffer meeting
01/11/22	Schamel, Mark	0.40	Emails and texts with client; emails with counsel for Alpha Bank
01/13/22	Jara, Ana L.	0.20	Confer with M. Schamel re: case updates and quashing subpoena
01/13/22	Schamel, Mark	1.90	Telephone call with S. Tyrrell counsel for R. Joffe; emails with client and Georgia Tech counsel; telephone call with A. Jara
01/14/22	Jara, Ana L.	1.50	Meet with Georgia Tech counsel, M. Schamel, and client over Zoom re: case updates, subpoena strategy, and next steps in litigation
01/14/22	Schamel, Mark	1.80	Meet with Georgia Tech counsel, A. Jara, and client over Zoom re: case updates, subpoena strategy, and next steps in litigation; emails with team re: to-do list
01/18/22	Jara, Ana L.	3.40	Attend meeting via Zoom with client and M. Schamel re: how to respond to attorney proffer questions from Plaintiffs
01/18/22	Schamel, Mark	4.40	Attend meeting via Zoom with client and A. Jara re: how to respond to attorney proffer questions from Plaintiffs; email with Plaintiff's counsel, local counsel and Georgia Tech counsel
01/19/22	Schamel, Mark	0.80	Telephone call with Georgia Tech counsel and client
01/20/22	Schamel, Mark	0.60	Email and telephone call with Georgia Tech counsel and client
01/21/22	Schamel, Mark	0.80	Emails with plaintiff counsel; telephone call with Georgia Tech counsel re: DARPA
01/24/22	Jara, Ana L.	3.40	Attend attorney proffer with civil litigation counsel for Alpha Bank; confer with M. Schamel and C. Schafbuch re: same; attend meeting with DARPA and Georgia Tech counsel re: response to civil subpoenas
01/24/22	Schafbuch, Christopher	2.90	Prepare for proffer with counsel for Alfa-Bank and attention to emails re: same; attend attorney proffer with civil litigation counsel for Alpha Bank; confer with M. Schamel and A. Jara re: same
01/24/22	Schamel, Mark	3.40	Attend attorney proffer with civil litigation counsel for Alpha Bank; confer with A. Jara and C. Schafbuch re: same; attend meeting with DARPA and General Counsel for Georgia Tech re: response to civil subpoenas

From: Antonakakis, Manos <manos@gatech.edu> Sent: Saturday, July 24, 2021 10:50 AM

To: McLaughlin, Steven W; Abdallah, Chaouki T; Nie, Ling-Ling

Subject: Re: FGJ Subpoena for Manos Antonakakis

Hey Steve, Chaouki and Ling-Ling,

Hope you are doing great.

I have not been bothering you about this because I have been told by Christian (who is an absolute Rock star!) that Ling-Ling (or someone in her team) has been communicating to you what is going on with this situation.

This email is not about me explaining to you that I have done nothing wrong. I suspect that now that Christian has all the information he needs he can independently arrive at that conclusion and communicate what needs to be communicated to you.

This email is about the key question, "And now what?"

From where I stand, and for the first time in my life I felt that I am being investigated by law enforcement because of my ideas and the work I have done for the USG/DoD. For the first time since the moment I landed in Dulles international airport on October 1st of 2004, I had a serious discussion with my wife about moving back to Greece. Most importantly, however, I brought unnecessary attention from the DoJ in my working environment. This besides potentially hurting my reputation within GT (even if it is from an optics point of view) it also personally disappoints me greatly, because as a GT PhD student (2006-2012) and now as a faculty (2014-now) I always had as a goal to bring good news, recognition and success to GT --- and certainly not the attention of a special council.

If I make an attempt to come in your shoes, it would be absolutely reasonable for all of you to have questions about the risk that my research (and perhaps even myself) could bring to the Institute in the future. Therefore, when the dust settles I would like to have a discussion with all of you about the following two key open questions:

- First and foremost, how do you feel about my actions now that GT legal has a plethora of my emails and after I spent countless hours explaining to everyone why I did what I did at the time I did it? If you think I did something unethical (not necessarily illegal) I will work with GT to smoothly (see running projects, students, SOW deliverables, etc.) or otherwise transition out. You have my word on this.
- 2. Big data analysis and machine learning for attack attribution is the future. After all these events with this politically driven inquisition, I need to see if there is a place where I can keep working on this research space that I invented over the last 5 years through my work in EA. What I would like to know is how GT upper management and legal feels about my line of research after all these events? Is GT a place that would welcome more innovation in this space, or this is simply not your (read is as GT's) cup of tea anymore?

Finally, I will leave you with an anecdote and a thought. During one of my interviews with the Special Counsel prosecutor, I was asked point blank by Mr. DeFilippis, "Do you believe that DARPA should be instructing you to investigate the origins of a hacker (Guccifer_2.0) that hacked a political entity (DNC)?" Let that sync for a moment, folks. Someone hacked a political party (DNC, in this case), in the middle of an election year (2016), and the lead investigator of DoJ's special council would question whether US researchers working for DARPA should conduct investigations in this matter is "acceptable"! While I was tempted to say back to him "What if this hacker hacked GOP? Would you want me to investigate him then?", I kept my cool and I told him that this is a question for DARPA's director, and not for me to answer.

Steve, Chaouki and Ling-Ling; please, try to imagine a "United States of America" where investigations and prosecutions are determined by ideas and political believes. This has been tried before in human history and the results of it was forced labor and Gulags.

Folks, I strongly believe we will need this type of research and much more innovation in this space to preserve our democracy. This is factually true for a single yet fundamental reason: data driven scientific attribution is unbiased politically. Data belongs to no political party. Our nation's adversaries will keep attacking our country --- I am certain of this because their attacks simply work and are tremendously impactful to our society.

Thank you and have a great weekend.

PS. I am writing this email on a weekend because this is my first downtime since July 2nd when I received the subpoena. Thanks, Manos

From: "Nie, Ling-Ling" <linglingnie@gatech.edu>

Date: Friday, July 2, 2021 at 7:50 PM

To: "Antonakakis, Manos" <manos@gatech.edu>, "McLaughlin, Steven W" <swm@gatech.edu>, "Abdallah, Chaouki T" <ctabdallah@gatech.edu>, "Wasch, Kate" <kate.wasch@legal.gatech.edu>, "Lunon, Darryl" <dl91@gatech.edu>

Subject: Re: FGJ Subpoena for Manos Antonakakis

Hi Manos: Thanks for forwarding. I'm copying Kate's correct email address and adding Darryl. We will confer internally

From:Angelos D. KeromytisSent on:Tuesday, April 16, 2019 5:29:31 PMTo:Manos Antonakakis<manos@gatech.edu>Subject:Ben Radford's talk info (just FYI, you'll probably be away)Attachments: signature.asc (499 Bytes)

Title:

Machine Learning Approaches for Cybersecurity Incident Measurement

Abstract:

The proliferation of advanced threat actors in cyberspace has left cybersecurity practitioners, engineers, and social scientists struggling to stay ahead of a phenomenon that is reshaping political conflict. The timely detection and attribution of these incidents is necessary to understand the threat environment, the actors therein, and the capabilities and objectives of those actors. Better attribution, along with more precise measurement of cybersecurity events in general, will not only lead to better legal and policy outcomes but also to an understanding of how political conflict occurs in a cyber-connected world.

In this talk, Dr. Radford will discuss his research that applies machine learning to assist analysts with incident discovery and response. The talk will also explore the state of cybersecurity data available for quantitative social science research, the importance of having such data, and the challenges of acquiring it. Finally, Dr. Radford will introduce a machine learning-based method for quickly producing structured event data on cybersecurity incidents for use in social science applications.

Bio:

Benjamin J. Radford studies political conflict, cybersecurity, and the application of machine learning to problems in these domains. Dr. Radford has worked on several research programs for the United States Government including projects at DARPA and the Office of Naval Research. In addition to his work on conflict forecasting, civil war, and political event data, he has worked as a principal data scientist on efforts for cybersecurity incident detection and as principal investigator for a government-funded cybersecurity attribution program. His research has been published in the "Journal of Conflict Resolution" and "Political Science Research and Methods", among other venues. Dr. Radford received his PhD in political science from Duke University and he is currently the President and Chief Scientist of LevelUp Research.

From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Sent on: Wednesday, October 24, 2018 10:44:46 PM To: Hughes, Nolan E. (WF) (FBI) <nhughes@fbi.gov>; Kealiher, Brandon (WF) (FBI) <bkealiher@fbi.gov>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; NGUYEN, TU A SA USAF AFOSI AFOSI/3 FIS/CIO <tu.nguyen.3@us.af.mil>; STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil>; Tejas Patel (tejas@kududyn.com) <tejas@kududyn.com>; chase.collins@us.af.mil; chunt@fbi.gov; jim.simpson (jim.simpson@cynnovative.com) <jim.simpson@cynnovative.com>; manos@gatech.edu; rtberryman@fbi.gov; ryan.schilcher@us.af.mil CC: GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil> Subject: EA-AFOSI Hack a Thon Attachments: meeting.ics (3.66 KB)

EA Hack-a-Thon Objective:

Collaborate with EA performers and Transition Partners to conduct a deep dive into current EA data sets and investigate what options exist for pivoting into partner data sets. Additionally, we will work through specific use cases/challenge problems, develop new TTP's, run real-time queries, and brainstorm ideas for future improvements/developments and collaboration.

Things that need to happen prior to meeting:

- Access to AFOSI data whether through Horizon Desktop or other means
- Type of data/queries/searches for things of interest/note from AFOSI
- Access to GT Oracle for Kudu
- Access to Kudu VPN/Cluster

From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Sent on: Thursday, October 25, 2018 12:11:25 AM To: Hughes, Nolan E. (WF) (FBI) <nhughes@fbi.gov>; Kealiher, Brandon (WF) (FBI) <bkealiher@fbi.gov>; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; NGUYEN, TU A SA USAF AFOSI AFOSI/3 FIS/CIO <tu.nguyen.3@us.af.mil>; STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambaugh@us.af.mil>; Tejas Patel (tejas@kududyn.com) <tejas@kududyn.com>; chase.collins@us.af.mil; chunt@fbi.gov; cojones@cybercom.mil; for the terry of terr

Address: 266 Ferst Dr Atlanta, GA 30332

Room: TBD

Plan to meet Wednesday, 14 Nov at 0900

EA Hack-a-Thon Objective:

Collaborate with EA performers and Transition Partners to conduct a deep dive into current EA data sets and investigate what options exist for pivoting into partner data sets. Additionally, we will work through specific use cases/challenge problems, develop new TTP's, run real-time queries, and brainstorm ideas for future improvements/developments and collaboration.

Things that need to happen prior to meeting:

- Access to AFOSI data whether through Horizon Desktop or other means
- Type of data/queries/searches for things of interest/note from AFOSI
- Access to GT Oracle for Kudu
- Access to Kudu VPN/Cluster

From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Sent on: Tuesday, November 13, 2018 3:51:04 PM To: ryan.schilcher@us.af.mil; Tejas Patel (tejas@kududyn.com) <tejas@kududyn.com>; jim.simpson (jim.simpson@cynnovative.com) <jim.simpson@cynnovative.com>; manos@gatech.edu; Keromytis, Angelos <angelos.keromytis@darpa.mil>; Kline, Allison (contr-i2o) <allison.kline.ctr@darpa.mil>; Ruch, Darren H <dhruch@cybercom.mil>; STAMBAUGH, JASON D SA USAF AFOSI AFOSI/XRCY <jason.stambauqh@us.af.mil>; NGUYEN, TU A SA USAF AFOSI AFOSI/3 FIS/CIO <tu.nguyen.3@us.af.mil>; chase.collins@us.af.mil; chunt@fbi.gov; Kealiher, Brandon (WF) (FBI) <bkealiher@fbi.gov>; david.eck.3@us.af.mil; rocio.mere.1@us.af.mil; rtberryman@fbi.gov; Hughes, Nolan E. (WF) (FBI) <nhughes@fbi.gov> CC: GEE, TYSON L SA USAF AFOSI AFOSI/XRC <tyson.gee@us.af.mil>; Gilligan, Sean M. (WF) (FBI) <smgilligan@fbi.gov>; Ware, William D. II (AT) (FBI) <wdware@fbi.gov>

Attachments: meeting.ics (4.71 KB), EA Agenda.docx (12.27 KB)

Updated Attendees and added agenda. Also, my cell phone is the best way to get a hold of me once we are in Atlanta, please call or text if you have any questions/concerns:

Chris Schneck DARPA I2O SETA 571-524-3821 (cell)

Address: 266 Ferst Dr Atlanta, GA 30332

Room: 3361

Plan to meet Wednesday, 14 Nov at 0830

EA Hack-a-Thon Objective:

Collaborate with EA performers and Transition Partners to conduct a deep dive into current EA data sets and investigate what options exist for pivoting into partner data sets. Additionally, we will work through specific use cases/challenge problems, develop new TTP's, run real-time queries, and brainstorm ideas for future improvements/developments and collaboration.

Things that need to happen prior to meeting:

* Access to AFOSI data whether through Horizon Desktop or other means

- * Type of data/queries/searches for things of interest/note from AFOSI
- * Access to GT Oracle for Kudu
- * Access to Kudu VPN/Cluster

Key Speakers & Organizers Include:

- Nicolas Alvarez, Drexel University
- Samiul Amin, Manhattan College
- · Kawakahi Amina, U.S. Indo-Pacific Command
- Thomas Anchordoquy, University of Colorado
- Wolfgang S. Bacsa, University of Toulouse
- Chulsung Bae, Rensselaer Polytechnic Institute
- Andrew P. Baumann, U.S. Food and Drug Administration (FDA)
- · Vikas Berry, University of Illinois at Chicago
- Jean Berthier, University of Washington
- Peter Bishop, Johnson Matthey, UK
- Carlos Bosques, Evolved by Nature
- Patrick Brant
- Keith Brown, Boston University
- Steven Buechler, University of Notre Dame; DiagenomiX
- Vincent Bulone, University of Adelaide, AU
- Elizabeth Burton, UC Berkeley
- Ahmed Busnaina, Northeastern University
- Jim Caley, U.S. Navy
- Fiona Case, TechConnect
- · Ishita Chakraborty, Stress Engineering Services
- Jeffrey Chalmers, The Ohio State University
- Hongda Chen, U.S. Department of Agriculture
- Yupeng Chen, University of Connecticut
- Zhaofeng Chen, Nanjing University of Aeronautics and Astronautics
- Jim Clarke, Intel
- Alisa Morss Clyne, University of Maryland
- Jeannine M. Coburn, Worcester Polytechnic Institute
- · Connor Coley, MIT
- · Khershed P. Cooper, National Science Foundation
- · Katrina Cornish, Ohio State
- Randy D. Cortright, National Renewable Energy Laboratory (NREL)
- Ronald A. Coutu, Marquette University
- · Lou Dadock, FUJIFILM Dimatix, Inc.
- Payel Das, IBM Thomas J Watson Research Center
- Philip Demokritou, Harvard School of Public Health
- · Charles Dimmler, Checkerspot
- Marina A. Dobrovolskaia, National Cancer Institute
- · Ananth Dodabalapur, The University of Texas at Austin
- Tomasz Durakiewicz, US National Science Foundation
- Christine E. Duval, Case Western Reserve University
- Alan Evans, Corning Optical Communications
- Anne Fischer, DARPA
- Aaron D. Franklin, Duke University
- Yoshihito Fukasawa, Asahi Kasei Construction Materials Corporation
- Susan Fullerton, University of Pittsburgh
- Eric Gale, Harvard Medical School
- Genet Garamendi, Checkerspot, Inc.
- Slade H Gardner, Big Metal Additive, Inc.
- Sean Garner, Corning Inc.
- Geoffrey M. Geise, University of Virginia
- Chuck Geraci, NIOSH
- Hossein Ghezel-ayagh, FuelCell Energy
- Adam Goff, Luna Innovations
- Yury Gogotsi, Drexel University
- Bill Goldner, USDA Office of the Chief Scientist
- Joamin Gonzalez-Gutierrez, University of Leoben
- Pankaj Gupta, The Dow Chemical Company
- Imre Gyuk, Director, U.S. Department of Energy

- Prithwiraj Maitra, Johnson and Johnson
- Debora S. Marks, Harvard Medical School
- Jeffrey McCutcheon, University of Connecticut
- Colleen McMahan, USDA
- Michael T. McMahon, Johns Hopkins University School of Medicine
- Kelsey McNeely, ExxonMobil
- Joey Mead, UMass Lowell
- Chris Menzel, Fujifilm Dimatix, Inc.
- Chris Milroy, NVIDIA
- Junhong Min, Chung-Ang University, S. Korea
- Sven Mumme, U.S DOE
- Ron Munson, Cogentiv Solutions LLC
- Deborah J. Myers, Argonne National Laboratory
- Prakash D. Nallathamby, Notre Dame University
- Tse Nga (Tina) Ng, Univ. of California San Diego
- World L-S Nieh, U.S. Forest Service
- Jan-Steffen Niehaus, Fraunhofer-Center for Applied Nanotechnology
- · Alex Norman, Ingredion Inc.
- Kwang W. Oh, Univ. at Buffalo (SUNY)
- Michele Ostraat, Aramco Research
- · Len Pagliaro, Siva Therapeutics Inc.
- Pierre Panine, Xenocs SA, France
- · Kyoo-Chul (Kenneth) Park, Northwestern University
- Srikanth Pilla, Clemson University
- Olivier Pluchery, Sorbonne Université; BICRHOMATICS
- Johan Pluyter, Pluyter Consulting, LLC
- Martin Poitzsch, Aramco Services Company
- Elena Polyakova, Graphene Laboratories, Inc.; National Univ. of Singapore
- Joe Pratt, Golden Gate Zero Emission Marine
- YuanQiao Rao, The Dow Chemical Company
- Julia Rashba-Step, Phosphorex
- Matteo Rinaldi, Northeastern University
- Joshua Robinson, Penn State University
- Ryan Roeder, University of Notre Dame; Spinesmith LLC
- Orlando Rojas, University of British Columbia, Canada
- Ross Roley, US Indo Pacific Command
- Rick Ross, 3M Company
- Robert Ryan, Twining, Inc.
- Subramanian Sankaranarayanan, Argonne National Lab
- Luis Santos, AstraZeneca

· Brent M Segal, Lockheed Martin

Jo Anne Shatkin, Vireo Advisors

Wu-Sheng Shih, Brewer Scientific

Harjit Singh, Brunel University London, UK
Edsger Smits, Holst Centre, Netherlands

Lalitha Oukumumine Daarault Outburg

· Lydia Sohn, University of California, Berkeley

Krzysztof Strzelec, Lodz Univ. of Technology, Poland

Maksim Shivokhin, ExxonMobil

Christopher Sims, NIST

Steven R. Sopher, JSP

Samuel Stavis, NIST

Christopher M. Stafford, NIST

Axel Scherer, CaltechMary Scott, UC Berkeley

Research

Technology

· Karma Sawyer, US DOE, Building Technologies Office

Maggie Scully, Frederick National Laboratory for Cancer

Rajesh Shende, South Dakota School of Mines &

based method for quickly producing structured event data on cybersecurity incidents for use in social science applications.

Bio:

Benjamin J. Radford studies political conflict, cybersecurity, and the application of machine learning to problems in these domains. Dr. Radford has worked on several research programs for the United States Government including projects at DARPA and the Office of Naval Research. In addition to his work on conflict forecasting, civil war, and political event data, he has worked as a principal data scientist on efforts for cybersecurity incident detection and as principal investigator for a government-funded cybersecurity attribution program. His research has been published in the "Journal of Conflict Resolution" and "Political Science Research and Methods", among other venues. Dr. Radford received his PhD in political science from Duke University and he is currently the President and Chief Scientist of LevelUp Research.

Finally, I will leave you with an anecdote and a thought. During one of my interviews with the Special Counsel prosecutor, I was asked point blank by Mr. DeFilippis, "Do you believe that DARPA should be instructing you to investigate the origins of a hacker (Guccifer_2.0) that hacked a political entity (DNC)?" Let that sync for a moment, folks. Someone hacked a political party (DNC, in this case), in the middle of an election year (2016), and the lead investigator of DoJ's special council would question whether US researchers working for DARPA should conduct investigations in this matter is "acceptable"! While I was tempted to say back to him "What if this hacker hacked GOP? Would you want me to investigate him then?", I kept my cool and I told him that this is a question for DARPA's director, and not for me to answer.

Steve, Chaouki and Ling-Ling; please, try to imagine a "United States of America" where investigations and prosecutions are determined by ideas and political believes. This has been tried before in human history and the results of it was forced labor and Gulags.

Folks, I strongly believe we will need this type of research and much more innovation in this space to preserve our democracy. This is factually true for a single yet fundamental reason: data driven scientific attribution is unbiased politically. Data belongs to no political party. Our nation's adversaries will keep attacking our country --- I am certain of this because their attacks simply work and are tremendously impactful to our society.

Thank you and have a great weekend.

PS. I am writing this email on a weekend because this is my first downtime since July 2nd when I received the subpoena. Thanks, Manos

From: "Nie, Ling-Ling" <linglingnie@gatech.edu>

Date: Friday, July 2, 2021 at 7:50 PM

To: "Antonakakis, Manos" <manos@gatech.edu>, "McLaughlin, Steven W" <swm@gatech.edu>, "Abdallah, Chaouki T" <ctabdallah@gatech.edu>, "Wasch, Kate" <kate.wasch@legal.gatech.edu>, "Lunon, Darryl" <dl91@gatech.edu>

Subject: Re: FGJ Subpoena for Manos Antonakakis

Hi Manos: Thanks for forwarding. I'm copying Kate's correct email address and adding Darryl. We will confer internally and come back to you early next week as there are some people who are out of the office for the holiday weekend that we will need to loop in.

From: Antonakakis, Manos <manos@gatech.edu>
Sent: Friday, July 2, 2021 2:39 PM
To: McLaughlin, Steven W; Abdallah, Chaouki T; kate.wesch@legal.gatech.edu; Nie, Ling-Ling
Subject: Fw: FGJ Subpoena for Manos Antonakakis
Hey Steve/Chaouki/Kate/Ling-Ling,

Hope you are doing great! Evidently I need to appear in front of a Grand Jury on July 15th. Any idea if I should talk with GT counsel before or if anyone from GT should be with me in this testimony?

This is a first for me so I am not sure what to do next.

Thanks, Manos

From: Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov> Sent: Friday, July 2, 2021 4:28 PM To: Antonakakis, Manos Cc: kate.wesch@legal.gatech.edu; Fuhrman, Tim (JMD) Subject: FGJ Subpoena for Manos Antonakakis

Dear Mr. Antonakakis - This is Jack Eckenrode, an Investigator with the US Justice Department. Together with my colleague Tim Fuhrman, copied here, with whom you may have had previous contact, we are attaching a federal grand jury subpoena seeking your testimony in Washington, DC on July 15, 2021 at 1:00pm. You should feel free to contact either one of us in the event that you have any questions related to the subpoena or your appearance.

Also copied for her awareness is Kate Wasch, legal counsel from Georgia Tech.

From: Thrash, Sherryll D<sherryll.thrash@carnegie.gatech.edu>
Sent on: Monday, July 26, 2021 1:19:16 PM
To: Antonakakis, Manos<manos@gatech.edu>
Subject: FW: FGJ Subpoena for Manos Antonakakis

Dear Manos Antonakakis:

This message is to acknowledge receipt of your email. I will be in touch soon to schedule a meeting. Kind regards,

Sherryll

SHERRYLL D. THRASH Administrative Manager & Assistant to the VP & General Counsel
Georgia Institute of Technology
Office of the General Counsel
221 Uncle Heinie Way | Lyman Hall, Suite 305
Atlanta, GA 30332-0257
☎ O: (404) 385.5673 | M: (470) 330.5127
☑: sherryll.thrash@carnegie.gatech.edu

From: Antonakakis, Manos <<u>manos@gatech.edu</u>>
Date: Saturday, July 24, 2021 at 10:50 AM
To: McLaughlin, Steven W <<u>swm@gatech.edu</u>>, Abdallah, Chaouki T <<u>ctabdallah@gatech.edu</u>>, Nie, Ling-Ling
<<u>linglingnie@gatech.edu</u>>
Subject: Re: FGJ Subpoena for Manos Antonakakis

Hey Steve, Chaouki and Ling-Ling,

Hope you are doing great.

I have not been bothering you about this because I have been told by Christian (who is an absolute Rock star!) that Ling-Ling (or someone in her team) has been communicating to you what is going on with this situation.

This email is not about me explaining to you that I have done nothing wrong. I suspect that now that Christian has all the information he needs he can independently arrive at that conclusion and communicate what needs to be communicated to you.

This email is about the key question, "And now what?"

From where I stand, and for the first time in my life I felt that I am being investigated by law enforcement because of my ideas and the work I have done for the USG/DoD. For the first time since the moment I landed in Dulles international airport on October 1st of 2004, I had a serious discussion with my wife about moving back to Greece. Most importantly, however, I brought unnecessary attention from the DoJ in my working environment. This besides potentially hurting my reputation within GT (even if it is from an optics point of view) it also personally disappoints me greatly, because as a GT PhD student (2006-2012) and now as a faculty (2014-now) I always had as a goal to bring good news, recognition and success to GT --- and certainly not the attention of a special council.

If I make an attempt to come in your shoes, it would be absolutely reasonable for all of you to have questions about the risk that my research (and perhaps even myself) could bring to the Institute in the future. Therefore, when the dust settles I would like to have a discussion with all of you about the following two key open questions:

- First and foremost, how do you feel about my actions now that GT legal has a plethora of my emails and after I spent countless hours explaining to everyone why I did what I did at the time I did it? If you think I did something unethical (not necessarily illegal) I will work with GT to smoothly (see running projects, students, SOW deliverables, etc.) or otherwise transition out. You have my word on this.
- 2. Big data analysis and machine learning for attack attribution is the future. After all these events with this politically driven inquisition, I need to see if there is a place where I can keep working on this research space that I invented over the last 5 years through my work in EA. What I would like to know is how GT upper management and legal feels about my line of research after all these events? Is GT a place that would welcome more innovation in this space, or this is simply not your (read is as GT's) cup of tea anymore?

Finally, I will leave you with an anecdote and a thought. During one of my interviews with the Special Counsel prosecutor, I was asked point blank by Mr. DeFilippis, "Do you believe that DARPA should be instructing you to investigate the origins of a hacker (Guccifer_2.0) that hacked a political entity (DNC)?" Let that sync for a moment, folks. Someone hacked a political party (DNC, in this case), in the middle of an election year (2016), and the lead investigator of DoJ's special council would question whether US researchers working for DARPA should conduct investigations in this

From: Schneck, Christopher J <cjschn3@cybercom.mil> Sent on: Tuesday, June 15, 2021 2:32:19 AM To: 'Antonakakis, Manos' <manos@gatech.edu>; Kline, Allison <allison.kline@darpa.mil>; Schneck, Christopher (contri2o) <christopher.schneck.ctr@darpa.mil> CC: Beyah, Raheem A <rbeyah@coe.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: RE: [Non-DoD Source] Final EA PI meeting at GT + GEN Stanton Keynote Opportunity

Ok, I'll talk to Allison and confirm. It looks like our target should be 30/31 Aug.

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Monday, June 14, 2021 9:11 PM To: Kline, Allison <allison.kline@darpa.mil>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Cc: Beyah, Raheem A <rbeyah@coe.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: [Non-DoD Source] Final EA PI meeting at GT + GEN Stanton Keynote Opportunity

Hey Allison and Chris,

Per your request I have been able to secure the permission to host the EA PI meeting in GT at the end of August from the GT leadership CCed. Dr. Beyah (Dean of CoE) and Dr. Abdallah (EVP of Research of GT) should be able to link Chris and the DARPA stuff with the right people in GT to find the exact location (regarding size) and handle any special audio/visual requests you might have for the UNCLASSIFIED space necessary.

Finally, and per our discussion with Chris I was to investigate the possibility of having GEN Stanton give the opening keynote for this last PI meeting. I just got a message from him (through Ed) and his message was:

Sure, but schedule getting tight:

- 16-20 Aug is Technet Augusta, for which I will have significant responsibilities.

- 25-26 Aug is the Senior Leader Readiness Forum, which may require travel to NCR.

So, if we want him to give us the keynote we need to do two things:

- Pick a day outside the 16-20 Aug and 25-26 Aug.

- Communicate that date to him asap.

Chaouki/Raheem, can we please link our people with DARPA so we can converge on a date for this last EA PI event and communicate this to GEN Stanton asap?

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS>

Sent on: Tuesday, June 29, 2021 9:09:29 PM

- To: Cabrera, Angel<angel.cabrera@gatech.edu>
- CC: Beyah, Raheem A<rbeyah@coe.gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu>; Lever, Charles C<chazlever@gatech.edu>

Subject: Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029

Dear Angel,

This is a case where

From: Lever, Charles C <chazlever@gatech.edu>

Date: Tuesday, June 29, 2021 at 4:05 PM

To: Sibble, Dan <Dan.Sibble@osp.gatech.edu>

Cc: Antonakakis, Manos <manos@gatech.edu>, Lever, Charles C <chazlever@gatech.edu>, Garrison, William R <wgarrison7@gatech.edu>, Mitchell, Michael F <michael.mitchell@ece.gatech.edu>, Beyah, Raheem A <rbeyah@coe.gatech.edu>, Abdallah, Chaouki T <ctabdallah@gatech.edu>

Subject: Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029

Hi Dan,

Is there an ETA on when this will get done? We really need to get this out the door no later than tomorrow morning or money will start disappearing.

On Jun 29, 2021, at 3:37 PM, Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> wrote:

Good Afternoon,

As a function of the compliance matters included in the terms (DFARs 252.204-7012, Safeguarding Covered Defense Information & Cyber Incident Reporting as well as 252.204-7000, Disclosure of Information) the SSP and TCP (per institute policy) must be in place before institute signoff can occur. I am currently working to establish the status of two compliance requirements needed for OSP sign-off. The first item is the SSP. I have Leon confirming from the Cyber Security Compliance Team's perspective that this program can be appropriately covered under the subject lab-wide plan cited earlier. I have asked Leon to advise as soon as possible. The second compliance item pending is the Technology Control Plan (TCP). I spoke with OSP Leadership earlier this afternoon to apprise them of the status of the award and the pending items needed to obtain institute signoff.

As soon as I have confirmation on the completion of the (2) institute compliance requirements above I will promptly advise and seek OSP signoff of the subject award document.

V/r, Dan Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Ph: 404-987-6809

From:Antonakakis, Manos <<u>manos@gatech.edu</u>>
Sent:Tuesday, June 29, 2021 2:51 PM
To:Lever, Charles C <<u>chazlever@gatech.edu</u>>; Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>>
Cc:Garrison, William R <<u>wgarrison7@gatech.edu</u>>; Mitchell, Michael F <</p>
<u>michael.mitchell@ece.gatech.edu</u>>; Beyah, Raheem A <<u>rbeyah@coe.gatech.edu</u>>; Abdallah, Chaouki T <<u>ctabdallah@gatech.edu</u>>; Beyah, Raheem A <<u>rbeyah@coe.gatech.edu</u>>; Abdallah, Chaouki T
Subject:Re: [TIME SENSITIVE] Following Up on DARPA CHASE HB001118S0047 - N66001-21-C-4029

Subject:Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029 Can we please finalize this?

Thanks, Manos

From:Lever, Charles C <<u>chazlever@gatech.edu</u>> Date:Tuesday, June 29, 2021 at 1:59 PM To:Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> Cc:Antonakakis, Manos <<u>manos@gatech.edu</u>>, Garrison, William R <<u>wgarrison7@gatech.edu</u>> >, Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>> Subject:Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 -N66001-21-C-4029

Hey Dan, Any updates?

On Jun 29, 2021, at 9:18 AM, Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> wrote:

Excellent. Thanks Manos! Dan Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

From:Antonakakis, Manos <<u>manos@gatech.edu</u>> Sent:Tuesday, June 29, 2021 8:53 AM To:Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>>; Lever, Charles C < <u>chazlever@gatech.edu</u>>; Garrison, William R <<u>wgarrison7@gatech.edu</u>> Cc:Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>> Subject:Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 -N66001-21-C-4029 We do. William can provide you the SSP plan if necessary. It is the same we sent OSP for HACCS, 5G and EA.

From:Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>>
Sent:Tuesday, June 29, 2021 08:19
To:Lever, Charles C
Cc:Mitchell, Michael F; Antonakakis, Manos
Subject:RE: [TIME SENSITIVE] Following Up on DARPA CHASE
HR001118S0047 - N66001-21-C-4029
As a follow up, can you confirm whether or not your lab is under a Lab-wide System
Security Plan (SSP)?

Best,

Dan

Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 -----Original Message-----From: Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> Sent: Tuesday, June 29, 2021 8:11 AM To: 'Lever, Charles C' <<u>chazlever@gatech.edu</u>> Cc: Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>; Antonakakis, Manos < <u>manos@gatech.edu</u>> Subject: RE: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029

Good Morning,

I received the current contract draft at the end of last week. I am working it through our internal routing chain and I hope to have it clear for return shortly.

I will provide another status update this afternoon.

Best,

Dan

Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

-----Original Message-----From: Lever, Charles C <<u>chazlever@gatech.edu</u>> Sent: Monday, June 28, 2021 4:38 PM To: Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> Cc: Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>; Antonakakis, Manos < <u>manos@gatech.edu</u>> Subject: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 -N66001-21-C-4029

Hi Dan,

I reached out to DARPA and got word from the PM that DARPA is still waiting on forms to be signed and sent back by GT. We had some points of clarification in April that were addressed by Michael and myself. What's the current hold up? The PM really needs these forms back by tomorrow, or it's likely we will start losing money due to changes in DARPA budgets. What do we need to do to make this happen?

Dr. Charles (Chaz) Lever Research Faculty @ Georgia Institute of Technology<u>www.chazlever.com</u>| chazlever@gatech.edu From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS>

Sent on: Tuesday, June 29, 2021 9:08:21 PM

- To: Lever, Charles C<chazlever@gatech.edu>; Sibble, Dan<Dan.Sibble@osp.gatech.edu>
- CC: Lever, Charles C<chazlever@gatech.edu>; Garrison, William R<wgarrison7@gatech.edu>; Mitchell, Michael F<michael.mitchell@ece.gatech.edu>; Beyah, Raheem A<rbeyah@coe.gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu>

Subject: Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029

Let's get things right here, gentlemen.

From: Lever, Charles C <chazlever@gatech.edu>

Date: Tuesday, June 29, 2021 at 4:05 PM

To: Sibble, Dan <Dan.Sibble@osp.gatech.edu>

Cc: Antonakakis, Manos <manos@gatech.edu>, Lever, Charles C <chazlever@gatech.edu>, Garrison, William R <wgarrison7@gatech.edu>, Mitchell, Michael F <michael.mitchell@ece.gatech.edu>, Beyah, Raheem A <rbeyah@coe.gatech.edu>, Abdallah, Chaouki T <ctabdallah@gatech.edu>

Subject: Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029

Hi Dan,

Is there an ETA on when this will get done? We really need to get this out the door no later than tomorrow morning or money will start disappearing.

On Jun 29, 2021, at 3:37 PM, Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> wrote: Good Afternoon,

As a function of the compliance matters included in the terms (DFARs 252.204-7012, Safeguarding Covered Defense Information & Cyber Incident Reporting as well as 252.204-7000, Disclosure of Information) the SSP and TCP (per institute policy) must be in place before institute signoff can occur. I am currently working to establish the status of two compliance requirements needed for OSP sign-off. The first item is the SSP. I have Leon confirming from the Cyber Security Compliance Team's perspective that this program can be appropriately covered under the subject lab-wide plan cited earlier. I have asked Leon to advise as soon as possible. The second compliance item pending is the Technology Control Plan (TCP). I spoke with OSP Leadership earlier this afternoon to apprise them of the status of the award and the pending items needed to obtain institute signoff.

As soon as I have confirmation on the completion of the (2) institute compliance requirements above I will promptly advise and seek OSP signoff of the subject award document.

V/r, Dan Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Ph: 404-987-6809

From:Antonakakis, Manos <<u>manos@gatech.edu</u>>
Sent:Tuesday, June 29, 2021 2:51 PM
To:Lever, Charles C <<u>chazlever@gatech.edu</u>>; Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>>
Cc:Garrison, William R <<u>wgarrison7@gatech.edu</u>>; Mitchell, Michael F <
<u>michael.mitchell@ece.gatech.edu</u>>; Beyah, Raheem A <<u>rbeyah@coe.gatech.edu</u>>; Abdallah, Chaouki T
<<u>ctabdallah@gatech.edu</u>>
Subject:Re: [TIME SENSITIVE] Following Up on DARPA CHASE HB001118S0047 - N66001-21-C-4029

Subject:Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029 Can we please finalize this?

From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Wednesday, June 30, 2021 8:59:27 PM

To: Sibble, Dan<Dan.Sibble@osp.gatech.edu>; Lever, Charles C<chazlever@gatech.edu>

CC: Lever, Charles C<chazlever@gatech.edu>; Garrison, William R<wgarrison7@gatech.edu>; Mitchell, Michael F<michael.mitchell@ece.gatech.edu>; Beyah, Raheem A<rbeyah@coe.gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu>

Subject: Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029

I will call you in two minutes from my cell:

The DARPA program manager is with me right now.

From: Sibble, Dan <Dan.Sibble@osp.gatech.edu>

Sent: Wednesday, June 30, 2021 3:42:12 PM

To: Antonakakis, Manos <manos@gatech.edu>; Lever, Charles C <chazlever@gatech.edu>

Cc: Lever, Charles C <chazlever@gatech.edu>; Garrison, William R <wgarrison7@gatech.edu>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu>; Beyah, Raheem A <rbeyah@coe.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu>

Subject: RE: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029 Manos,

I am not physically on campus today. I am working a 4PM DARPA proposal deadline but I will be available by phone after that time if you would like to reach me.

Dan

Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

From: Antonakakis, Manos <manos@gatech.edu> Sent: Wednesday, June 30, 2021 3:31 PM

To: Lever, Charles C <chazlever@gatech.edu>; Sibble, Dan <Dan.Sibble@osp.gatech.edu>

Cc: Lever, Charles C <chazlever@gatech.edu>; Garrison, William R <wgarrison7@gatech.edu>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu>; Beyah, Raheem A <rbeyah@coe.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu>

Subject: Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029 Dan, I am at GT with the DARPA program manager responsible for this contract. Can you tell me where your office is located? He would like to have a talk with you. Thanks, Manos

From: Lever, Charles C <<u>chazlever@gatech.edu</u>>

Sent: Tuesday, June 29, 2021 4:05:39 PM

To: Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>>

Cc: Antonakakis, Manos <<u>manos@gatech.edu</u>>; Lever, Charles C <<u>chazlever@gatech.edu</u>>; Garrison, William R < <u>wgarrison7@gatech.edu</u>>; Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>; Beyah, Raheem A < <u>rbeyah@coe.gatech.edu</u>>; Abdallah, Chaouki T <<u>ctabdallah@gatech.edu</u>>

Subject: Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029 Hi Dan,

Is there an ETA on when this will get done? We really need to get this out the door no later than tomorrow morning or money will start disappearing.

Good Afternoon,

As a function of the compliance matters included in the terms (DFARs 252.204-7012, Safeguarding Covered Defense Information & Cyber Incident Reporting as well as 252.204-7000, Disclosure of Information) the SSP and TCP (per institute policy) must be in place before institute signoff can occur. I am currently working to establish the status of two compliance requirements needed for OSP sign-off. The first item is the SSP. I have Leon confirming from the Cyber Security Compliance Team's perspective that this program can be appropriately covered under the subject lab-wide plan cited earlier. I have asked Leon to advise as soon as possible. The second compliance item pending is the Technology Control Plan (TCP). I spoke with OSP Leadership earlier this afternoon to apprise them of the status of the award and the pending items needed to obtain institute signoff.

As soon as I have confirmation on the completion of the (2) institute compliance requirements above I will promptly advise and seek OSP signoff of the subject award document.

V/r,

Dan Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Ph: 404-987-6809

From:Antonakakis, Manos <<u>manos@gatech.edu</u>>
Sent:Tuesday, June 29, 2021 2:51 PM
To:Lever, Charles C <<u>chazlever@gatech.edu</u>>; Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>>
Cc:Garrison, William R <<u>wgarrison7@gatech.edu</u>>; Mitchell, Michael F <</p>
michael.mitchell@ece.gatech.edu>; Beyah, Raheem A <<u>rbeyah@coe.gatech.edu</u>>; Abdallah, Chaouki T <<u>ctabdallah@gatech.edu</u>>
Subject:Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029
Can we please finalize this?
Thanks, Manos

From:Lever, Charles C <<u>chazlever@gatech.edu</u>> Date:Tuesday, June 29, 2021 at 1:59 PM To:Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> Cc:Antonakakis, Manos <<u>manos@gatech.edu</u>>, Garrison, William R <<u>wgarrison7@gatech.edu</u>> >, Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>> Subject:Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 -N66001-21-C-4029

Hey Dan,

Any updates?

On Jun 29, 2021, at 9:18 AM, Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> wrote:

Excellent. Thanks Manos! Dan Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

From:Antonakakis, Manos <<u>manos@gatech.edu</u>> Sent:Tuesday, June 29, 2021 8:53 AM To:Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>>; Lever, Charles C < <u>chazlever@gatech.edu</u>>; Garrison, William R <<u>wgarrison7@gatech.edu</u>> Cc:Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>> Subject:Re: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 -N66001-21-C-4029 We do. William can provide you the SSP plan if necessary. It is the same we sent OSP for HACCS, 5G and EA.

From:Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>>
Sent:Tuesday, June 29, 2021 08:19
To:Lever, Charles C
Cc:Mitchell, Michael F; Antonakakis, Manos
Subject:RE: [TIME SENSITIVE] Following Up on DARPA CHASE
HR001118S0047 - N66001-21-C-4029

As a follow up, can you confirm whether or not your lab is under a Lab-wide System Security Plan (SSP)?

Best,

Dan

Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

-----Original Message-----From: Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> Sent: Tuesday, June 29, 2021 8:11 AM To: 'Lever, Charles C' <<u>chazlever@gatech.edu</u>> Cc: Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>; Antonakakis, Manos < <u>manos@gatech.edu</u>> Subject: RE: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 - N66001-21-C-4029

Good Morning,

I received the current contract draft at the end of last week. I am working it through our internal routing chain and I hope to have it clear for return shortly.

I will provide another status update this afternoon.

Best,

Dan

Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

-----Original Message-----From: Lever, Charles C <<u>chazlever@gatech.edu</u>> Sent: Monday, June 28, 2021 4:38 PM To: Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> Cc: Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>; Antonakakis, Manos < <u>manos@gatech.edu</u>> Subject: [TIME SENSITIVE] Following Up on DARPA CHASE HR001118S0047 -N66001-21-C-4029

Hi Dan,

I reached out to DARPA and got word from the PM that DARPA is still waiting on forms to be signed and sent back by GT. We had some points of clarification in April that were addressed by Michael and myself. What's the current hold up? The PM really needs these forms back by tomorrow, or it's likely we will start losing money due to changes in DARPA budgets. What do we need to do to make this happen?

--

Dr. Charles (Chaz) Lever Research Faculty @ Georgia Institute of Technology<u>www.chazlever.com</u> chazlever@gatech.edu

From:	Antonakakis, Manos <manos@gatech.edu></manos@gatech.edu>		
Sent on:	Tuesday, September 8, 2020 3:50:27 PM		
To:	Nie, Ling-Ling <linglingnie@gatech.edu></linglingnie@gatech.edu>		
CC:	Keromytis, Angelos D <angelos@gatech.edu>; McLaughlin, Steven W<swm@coe.gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu>; Wasch, Kate<kate.wasch@legal.gatech.edu>; Egerstedt, Magnus<magnus.egerstedt@ece.gatech.edu></magnus.egerstedt@ece.gatech.edu></kate.wasch@legal.gatech.edu></ctabdallah@gatech.edu></swm@coe.gatech.edu></angelos@gatech.edu>		
Subject:	Re: Active DNS Project / election cyberattacks		
Attachments: signature.asc (201 Bytes)			

Ling-Ling, I just got off the call with DARPA. Please give me a call for a brief update.

Thanks, Manos

On Sep 8, 2020, at 11:28 AM, Nie, Ling-Ling <<u>linglingnie@gatech.edu</u>> wrote:

If someone would like to call me so I can understand the concern, I can be reached at 404-386-6254. Ling-Ling Nie General Counsel & Vice President for Ethics & Compliance <image001.png> From:"Keromytis, Angelos D" <<u>angelos@gatech.edu</u>> Date:Tuesday, September 8, 2020 at 11:26 AM To:"Nie, Ling-Ling" <<u>linglingnie@gatech.edu</u>> Cc:"Antonakakis, Manos" <<u>manos@gatech.edu</u>>, "McLaughlin, Steven W" < swm@coe.gatech.edu>, "Abdallah, Chaouki T" <<u>ctabdallah@gatech.edu</u>>, "Wasch, Kate" <

<u>kate.wasch@legal.gatech.edu</u>>, "Egerstedt, Magnus" <<u>magnus.egerstedt@ece.gatech.edu</u>> **Subject:**Re: Active DNS Project / election cyberattacks

No, please do not do that.

On Sep 8, 2020, at 11:15, Nie, Ling-Ling <<u>linglingnie@gatech.edu</u>> wrote:

Hi all—Good morning! If I may, I'd like to loop in Communications for their awareness and ask them to reach out to this reporter first to gather more background to share with us before proceeding so we can fully understand the context and timing. Please standby. Thanks, Ling-Ling From:"Antonakakis, Manos" <<u>manos@gatech.edu</u>>

Date:Tuesday, September 8, 2020 at 10:53 AM To:"McLaughlin, Steven W" <<u>swm@coe.gatech.edu</u>> Cc:"Abdallah, Chaouki T" <<u>ctabdallah@gatech.edu</u>>, "Keromytis, Angelos D" < <u>angelos@gatech.edu</u>>, "Nie, Ling-Ling" <<u>linglingnie@gatech.edu</u>>, "Wasch, Kate" <<u>kate.wasch@legal.gatech.edu</u>>, "Egerstedt, Magnus" < <u>magnus.egerstedt@ece.gatech.edu</u>> Subject:Fwd: Active DNS Project / election cyberattacks

Subject: Fwd: Active DNS Project / election cyberattacks Hey Steve,

This just came in. Perhaps we should get on a call with legal and discuss this request from the press?

Thanks, Manos

From: Antonakakis, Manos <manos@gatech.edu> Sent on: Monday, January 10, 2022 5:58:07 PM To: Patel, Tejas <tejas.patel@darpa.mil>; Perdisci, Roberto <perdisci@gatech.edu>; Ma, Zane <zanema@gatech.edu> CC: Keromytis, Angelos D <angelos@gatech.edu> Subject: Re: CHASE and OPS-5G PIs

Hey Tejas, yes, the rumors are true. Unfortunately, I cannot pay west coast industry rates at GT.

For OPS-5G the answer is very simple, Zane will take his place. Now, for CHASE the answer will likely be Roberto. We are working with GT OSP to finalize it, so please give us some time. In the meantime, I suggest we set up a call between me, you and Roberto to discuss what needs to be done with CHASE moving forward.

Thanks, Manos

From: Patel, Tejas <tejas.patel@darpa.mil> Sent: Monday, January 10, 2022 12:50 PM To: Antonakakis, Manos; Keromytis, Angelos D Subject: CHASE and OPS-5G PIs

Manos, Angelos,

I heard a rumour that Chaz is no longer at GT? Is this true? If so, do you have a POC for the new PI?

Regards, Tejas Patel Program Manager Defense Advanced Research Projects Agency Information Innovation Office email: tejas.patel@darpa.mil work: +1 (703) 526-2047 mobile: +1 (571) 421-3629 fax: +1 (703) 248-8040 From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS>

Sent on: Thursday, June 24, 2021 5:16:27 PM

To: Clement, Crystal D<crystal.clement@pe.gatech.edu>

CC: Abdallah, Chaouki T<ctabdallah@gatech.edu>

Subject: Re: Conference

Crystal, please do not communicate with the DARPA PM team without consulting with me first. As the PI of this project, I am often aware what should be communicated to them, when and how.

Thanks, Manos From: Clement, Crystal D <crystal.clement@pe.gatech.edu> Sent: Thursday, June 24, 2021 12:13:44 PM To: Antonakakis, Manos <manos@gatech.edu>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Kline, Allison <allison.kline@darpa.mil> Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: RE: Conference Hi!

We would love to host the meeting. Can I be included and I can send you pricing? Let me know.

Thanks!

Crystal Clement Sales Manager Georgia Institute of Technology 84 5th Street NW, Atlanta, GA 30308-1031 404-385-1690 | crystal.clement@pe.gatech.edu gatechcenter.com Keep up with GTPE 2018 Impact Report | LinkedIn | Facebook

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Tuesday, June 22, 2021 3:49 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Kline, Allison <allison.kline@darpa.mil> Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu>; Clement, Crystal D <crystal.clement@pe.gatech.edu> Subject: Re: Conference

Hey Chris and Allison,

Let me apologize here for the confusion. Apparently GT will need DARPA to pay for this event, and this was something I failed to clarify when I asked permission from the upper management to hold this final EA PI meeting at GT.

I suspect that you will have to make other plans and host this final PI meeting at another performer or at DARPA's facilities in DC.

Thanks and my apologies for the confusion. Totally my fault for failing to clarify this point before I communicate back to you what is possible.

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Clement, Crystal D <crystal.clement@pe.gatech.edu> Sent: Tuesday, June 22, 2021 11:41 AM To: Schneck, Christopher (contr-i2o); Antonakakis, Manos Cc: Kline, Allison Subject: RE: Conference

Hi Chris,

Good to hear from you. Let me know who will be signing the contract so we will know if you will be working with Tim or myself.

Thanks! Crystal Clement Sales Manager Georgia Institute of Technology 84 5th Street NW, Atlanta, GA 30308-1031 404-385-1690 | crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu> gatechcenter.com<<u>http://www.gatechcenter.com/</u>> Keep up with GTPE 2018 Impact Report<<u>https://pe.gatech.edu/2018-impact-report</u>> | LinkedIn | Facebook From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Sent: Monday, June 21, 2021 5:07 PM To: Antonakakis, Manos <manos@gatech.edu>; Gargis, Timothy A <tim.gargis@pe.gatech.edu>; Clement, Crystal D <crystal.clement@pe.gatech.edu>

Cc: Kline, Allison <allison.kline@darpa.mil>

Subject: RE: Conference

Crystal and Tim,

Nice to meet you, I look forward to working with you all to set up this event.

We are looking to hold a conference to conduct live demonstrations over 2 days from 30-31 Aug. Ideally, we will want a large conference room with a few smaller rooms to conduct breakout sessions if needed. I do not have a good count yet, but previous conferences had about 80 people. I suspect due to Covid, these numbers will be smaller. The break out rooms should hold 10/15 people max. The conference room should also be set up for Video Tele-Conferencing. I would prefer to use ZoomGov if that is possible. I have an account that can initiate the meeting, you will need a way to view and present a live camera feed and audio either through the desktop application, web browser, phone, or combination thereof.

Daily schedule will be:

0830-0900: arrival, breakfast/coffee 0900-1200: presentations 1200-1300 lunch 1300-1700: presentations What did I miss, what other questions do I need to answer for logistics/event management?

V/r,

Chris Schneck DARPA I2O SETA 571-218-4429 (office) 571-524-3821 (cell) 918-6691

From: Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> Sent: Tuesday, June 15, 2021 9:15 AM To: Gargis, Timothy A <tim.gargis@pe.gatech.edu<mailto:tim.gargis@pe.gatech.edu>>; Clement, Crystal D <crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu>> Cc: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>>; Kline, Allison <allison.kline@darpa.mil<mailto:allison.kline@darpa.mil>> Subject: Re: Conference

Chaouki and Raheem, many thanks I am moving you to BCC.

Crystal and Tim, very pleased to meet you! Allow me to introduce you to the DARPA team. I suspect that Chris will reach out to discuss the details about this PI meeting/conference with you.

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu < <u>mailto:manos@gatech.edu</u> > College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>> Date: Tuesday, June 15, 2021 at 7:43 AM To: Gargis, Timothy A <tim.gargis@pe.gatech.edu<mailto:tim.gargis@pe.gatech.edu>>, Clement, Crystal D <crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu>>, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>>, Beyah, Raheem A <rbeyah@coe.gatech.edu<mailto:rbeyah@coe.gatech.edu>> Subject: FW: Conference Crystal & Tim,

Professor Manos Antonakakis would like to host a high-level conference at Georgia tech. Via this email, I am putting you in touch with him in order to assist.

Chaouki T Abdallah

Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology 225 North Avenue, Carnegie Building Atlanta, Georgia 30332-0325

From: Fox, Kelly <kelly.fox@gatech.edu<mailto:kelly.fox@gatech.edu>> Date: Tuesday, June 15, 2021 at 7:38 AM To: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>>, McLaughlin, Steven W <swm@gatech.edu<mailto:swm@gatech.edu>> Subject: RE: Conference

Please work with Crystal Clement – crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu> or Tim Gargis at tim.gargis@pe.gatech.edu<mailto:tim.gargis@pe.gatech.edu>.

Thanks – Kelly

From: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>> Sent: Monday, June 14, 2021 8:13 PM To: Fox, Kelly <kelly.fox@gatech.edu<mailto:kelly.fox@gatech.edu>>; McLaughlin, Steven W <swm@gatech.edu<mailto:swm@gatech.edu>> Subject: Conference

Kelly,

This is about the DARPA conference I mentioned during last week's ELT. Can you please put him in touch with the appropriate folks who can help in conference management/arrangement?

Chaouki T. Abdallah Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology 225 North Avenue Atlanta, GA 30332-0325

From: Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> Date: Monday, June 14, 2021 at 7:18 PM To: Beyah, Raheem A <ab207@gatech.edu<mailto:ab207@gatech.edu>> Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>>, McLaughlin, Steven W <swm@gatech.edu<mailto:swm@gatech.edu>> Subject: Re: Much obliged, Raheem!

On other news, I think I was able to convince GEN Stanton (<u>https://www.arcyber.army.mil/Leaders/Leaders-Article-View-Page/Article/2463463/brig-gen-paul-t-stanton/</u>) to show up at GT for the final EA PI meeting. He will be giving the keynote for the event. It would be nice if one of you could introduce him to the audience and welcome him at GT.

The rumor has it that he will be the next head of NSA and USCC. It would be nice to think as GT being a friendly place for him.

Chaouki/Raheem, I will be CCing in an email with DARPA EA PM so we can finalize the date for the event. Chaouki, we are still good to go after your discussion with Angel about hosting this event, correct?

Many thanks, Manos

From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Thursday, June 24, 2021 5:25:38 PM

To: Clement, Crystal D<crystal.clement@pe.gatech.edu>

CC: Abdallah, Chaouki T<ctabdallah@gatech.edu>

Subject: Re: Conference

Hey Crystal. You might want to consult with me before communicating things to the DARPA PM. As the PI of the project, I might be able to advise you on what can and cannot be done.

Thanks, Manos From: Clement, Crystal D <crystal.clement@pe.gatech.edu> Sent: Thursday, June 24, 2021 12:13:44 PM To: Antonakakis, Manos <manos@gatech.edu>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Kline, Allison <allison.kline@darpa.mil> Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: RE: Conference Hi! We would love to host the meeting. Can I be included and I can send you pricing? Let me know.

Thanks!

Crystal Clement Sales Manager Georgia Institute of Technology 84 5th Street NW, Atlanta, GA 30308-1031 404-385-1690 | crystal.clement@pe.gatech.edu gatechcenter.com Keep up with GTPE 2018 Impact Report | LinkedIn | Facebook

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Tuesday, June 22, 2021 3:49 PM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Kline, Allison <allison.kline@darpa.mil> Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu>; Clement, Crystal D <crystal.clement@pe.gatech.edu> Subject: Re: Conference

Hey Chris and Allison,

Let me apologize here for the confusion. Apparently GT will need DARPA to pay for this event, and this was something I failed to clarify when I asked permission from the upper management to hold this final EA PI meeting at GT.

I suspect that you will have to make other plans and host this final PI meeting at another performer or at DARPA's facilities in DC.

Thanks and my apologies for the confusion. Totally my fault for failing to clarify this point before I communicate back to you what is possible.

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS)

School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Clement, Crystal D <crystal.clement@pe.gatech.edu> Sent: Tuesday, June 22, 2021 11:41 AM To: Schneck, Christopher (contr-i2o); Antonakakis, Manos Cc: Kline, Allison Subject: RE: Conference

Hi Chris,

Good to hear from you. Let me know who will be signing the contract so we will know if you will be working with Tim or myself.

Thanks! Crystal Clement Sales Manager Georgia Institute of Technology 84 5th Street NW, Atlanta, GA 30308-1031 404-385-1690 | crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu> gatechcenter.com<<u>http://www.gatechcenter.com/</u>> Keep up with GTPE 2018 Impact Report<<u>https://pe.gatech.edu/2018-impact-report</u>> | LinkedIn | Facebook

From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Sent: Monday, June 21, 2021 5:07 PM To: Antonakakis, Manos <manos@gatech.edu>; Gargis, Timothy A <tim.gargis@pe.gatech.edu>; Clement, Crystal D <crystal.clement@pe.gatech.edu> Cc: Kline, Allison <allison.kline@darpa.mil> Subject: RE: Conference

Crystal and Tim,

Nice to meet you, I look forward to working with you all to set up this event.

We are looking to hold a conference to conduct live demonstrations over 2 days from 30-31 Aug. Ideally, we will want a large conference room with a few smaller rooms to conduct breakout sessions if needed. I do not have a good count yet, but previous conferences had about 80 people. I suspect due to Covid, these numbers will be smaller. The break out rooms should hold 10/15 people max. The conference room should also be set up for Video Tele-Conferencing. I would prefer to use ZoomGov if that is possible. I have an account that can initiate the meeting, you will need a way to view and present a live camera feed and audio either through the desktop application, web browser, phone, or combination thereof.

Daily schedule will be:

0830-0900: arrival, breakfast/coffee 0900-1200: presentations 1200-1300 lunch 1300-1700: presentations

What did I miss, what other questions do I need to answer for logistics/event management?

V/r,

Chris Schneck DARPA I2O SETA 571-218-4429 (office) 571-524-3821 (cell) 918-6691

From: Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> Sent: Tuesday, June 15, 2021 9:15 AM To: Gargis, Timothy A <tim.gargis@pe.gatech.edu<mailto:tim.gargis@pe.gatech.edu>>; Clement, Crystal D <crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu>> Cc: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>>; Kline, Allison <allison.kline@darpa.mil<mailto:allison.kline@darpa.mil>> Subject: Re: Conference

Chaouki and Raheem, many thanks I am moving you to BCC.

Crystal and Tim, very pleased to meet you! Allow me to introduce you to the DARPA team. I suspect that Chris will reach out to discuss the details about this PI meeting/conference with you.

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu < <u>mailto:manos@gatech.edu</u> > College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>> Date: Tuesday, June 15, 2021 at 7:43 AM To: Gargis, Timothy A <tim.gargis@pe.gatech.edu<mailto:tim.gargis@pe.gatech.edu>>, Clement, Crystal D <crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu>>, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>>, Beyah, Raheem A <rbeyah@coe.gatech.edu<mailto:rbeyah@coe.gatech.edu>> Subject: FW: Conference Crystal & Tim,

Professor Manos Antonakakis would like to host a high-level conference at Georgia tech. Via this email, I am putting you in touch with him in order to assist.

Chaouki T Abdallah

Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology 225 North Avenue, Carnegie Building Atlanta, Georgia 30332-0325

From: Fox, Kelly <kelly.fox@gatech.edu<mailto:kelly.fox@gatech.edu>> Date: Tuesday, June 15, 2021 at 7:38 AM To: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>>, McLaughlin, Steven W <swm@gatech.edu<mailto:swm@gatech.edu>>

Subject: RE: Conference

Please work with Crystal Clement – crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu> or Tim Gargis at tim.gargis@pe.gatech.edu<mailto:tim.gargis@pe.gatech.edu>.

Thanks – Kelly

From: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>> Sent: Monday, June 14, 2021 8:13 PM To: Fox, Kelly <kelly.fox@gatech.edu<mailto:kelly.fox@gatech.edu>>; McLaughlin, Steven W <swm@gatech.edu<mailto:swm@gatech.edu>> Subject: Conference

Kelly,

This is about the DARPA conference I mentioned during last week's ELT. Can you please put him in touch with the appropriate folks who can help in conference management/arrangement?

Chaouki T. Abdallah Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology 225 North Avenue Atlanta, GA 30332-0325

From: Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> Date: Monday, June 14, 2021 at 7:18 PM To: Beyah, Raheem A <ab207@gatech.edu<mailto:ab207@gatech.edu>> Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>>, McLaughlin, Steven W <swm@gatech.edu<mailto:swm@gatech.edu>> Subject: Re: Much obliged, Raheem!

On other news, I think I was able to convince GEN Stanton (<u>https://www.arcyber.army.mil/Leaders/Leaders-Article-View-Page/Article/2463463/brig-gen-paul-t-stanton/</u>) to show up at GT for the final EA PI meeting. He will be giving the keynote for the event. It would be nice if one of you could introduce him to the audience and welcome him at GT.

The rumor has it that he will be the next head of NSA and USCC. It would be nice to think as GT being a friendly place for him.

Chaouki/Raheem, I will be CCing in an email with DARPA EA PM so we can finalize the date for the event. Chaouki, we are still good to go after your discussion with Angel about hosting this event, correct?

Many thanks, Manos

From: Antonakakis, Manos <manos@gatech.edu> Sent on: Tuesday, June 22, 2021 8:21:47 PM To: Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: Re: Conference

Hey Chaouki,

I do understand very well the cost that is associated with a typical ACM/IEEE conference. This is not it, however. In this case DARPA is looking at a performer to host an event for the program and the other teams that preforming in EA. This has already been done 3-4 times at GT between EA and HACCS (albeit in smaller scale), and DARPA has never paid a thing. The same has been done at UMD, ASU and USC, and again nobody paid a thing.

In any event, DARPA already called me perplexed about the contract request. I will just relay to them that we cannot do it at GT and they should look at hosting it somewhere else.

Thanks, Manos

From: Abdallah, Chaouki T <ctabdallah@gatech.edu> Sent: Tuesday, June 22, 2021 2:52 PM To: Antonakakis, Manos Subject: Re: Conference

Manos,

That was not my assumption! Sorry if I have misled you but a conference costs tens of thousands of dollars, and my assumption was that either the sponsor will pay or that the attendees will pay, just like an IEEE conference....

Sent from Chaouki's iPhone

> On Jun 22, 2021, at 8:52 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Hey Crystal,

>

> When I asked Chaouki about the possibility of hosting this event, the answer I received way yes, we can do this. Historically, when the sponsor of the project wants to do an even at GT, they do not pay for anything. This would be the first time where a sponsor has to pay for a room to hold an event for a program in which GT is a performer.

>

> Chaouki, what am I missing here?

>

> Thanks,

> —

- > Manos Antonakakis, Ph.D. | manos@gatech.edu
- > College of Engineering Dean's Professorship Chair and Associate Professor
- > Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS)
- > School of Electrical and Computer Engineering | Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- >

> To: Antonakakis, Manos

> From: Clement, Crystal D <crystal.clement@pe.gatech.edu>

> Sent: Tuesday, June 22, 2021 11:47 AM

> Cc: Abdallah, Chaouki T; Gargis, Timothy A

- > Subject: RE: Conference
- >
- > Hi Manos,
- > Can you tell me who told you there would be no fee? I do not know anything about an event with no fee.
- >
- > Thanks!
- >
- > Crystal Clement
- > Sales Manager
- > Georgia Institute of Technology
- > 84 5th Street NW, Atlanta, GA 30308-1031
- > 404-385-1690 | crystal.clement@pe.gatech.edu
- > gatechcenter.com
- > Keep up with GTPE
- > 2018 Impact Report | LinkedIn | Facebook
- >
- > -----Original Message-----
- > From: Antonakakis, Manos <manos@gatech.edu>
- > Sent: Tuesday, June 22, 2021 11:45 AM
- > To: Clement, Crystal D <crystal.clement@pe.gatech.edu>
- > Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu>
- > Subject: Re: Conference

>

> Crystal, can you please explain to me what this contract is about? I was under the impression that there will be no fee associated with this because DARPA is honoring us by moving the PI meeting in Atlanta.

>

- > Thanks,
- > —

> Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

- >
- >
- >

- > Cc: Kline, Allison
- > Subject: RE: Conference
- >
- > Hi Chris,

> Good to hear from you. Let me know who will be signing the contract so we will know if you will be working with Tim or myself.

- >
- > Thanks!
- > Crystal Clement
- > Sales Manager
- > Georgia Institute of Technology
- > 84 5th Street NW, Atlanta, GA 30308-1031
- > 404-385-1690 | crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu>
- > gatechcenter.com<<u>http://www.gatechcenter.com/</u>>
- > Keep up with GTPE
- > 2018 Impact Report < https://pe.gatech.edu/2018-impact-report | LinkedIn | Facebook
- >
- > From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>
- > Sent: Monday, June 21, 2021 5:07 PM

> To: Antonakakis, Manos <manos@gatech.edu>; Gargis, Timothy A <tim.gargis@pe.gatech.edu>; Clement, Crystal D

> From: Clement, Crystal D <crystal.clement@pe.gatech.edu>

> Sent: Tuesday, June 22, 2021 11:41 AM

> To: Schneck, Christopher (contr-i2o); Antonakakis, Manos

<crystal.clement@pe.gatech.edu>

- > Cc: Kline, Allison <allison.kline@darpa.mil>
- > Subject: RE: Conference
- >

> Crystal and Tim,

>

> Nice to meet you, I look forward to working with you all to set up this event.

>

> We are looking to hold a conference to conduct live demonstrations over 2 days from 30-31 Aug. Ideally, we will want a large conference room with a few smaller rooms to conduct breakout sessions if needed. I do not have a good count yet, but previous conferences had about 80 people. I suspect due to Covid, these numbers will be smaller. The break out rooms should hold 10/15 people max. The conference room should also be set up for Video Tele-Conferencing. I would prefer to use ZoomGov if that is possible. I have an account that can initiate the meeting, you will need a way to view and present a live camera feed and audio either through the desktop application, web browser, phone, or combination thereof.

>

- > Daily schedule will be:
- >
- > 0830-0900: arrival, breakfast/coffee
- > 0900-1200: presentations
- > 1200-1300 lunch
- > 1300-1700: presentations
- >

> What did I miss, what other questions do I need to answer for logistics/event management?

- >
- > V/r,
- >
- > Chris Schneck
- > DARPA I2O SETA
- > 571-218-4429 (office)
- > 571-524-3821 (cell)
- > 918-6691
- >
- > From: Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>>
- > Sent: Tuesday, June 15, 2021 9:15 AM
- > To: Gargis, Timothy A <tim.gargis@pe.gatech.edu<mailto:tim.gargis@pe.gatech.edu>>; Clement, Crystal D
- $<\!crystal.clement@pe.gatech.edu\!<\!mailto:crystal.clement@pe.gatech.edu\!>\!>$
- > Cc: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>>; Kline, Allison <allison.kline@darpa.mil<mailto:allison.kline@darpa.mil>>
- > Subject: Re: Conference
- >
- > Chaouki and Raheem, many thanks I am moving you to BCC.
- >
- > Crystal and Tim, very pleased to meet you! Allow me to introduce you to the DARPA team. I suspect that Chris will reach out to discuss the details about this PI meeting/conference with you.
- >
- > Thanks,
- > —
- > Manos Antonakakis, Ph.D. | manos@gatech.edu<<u>mailto:manos@gatech.edu</u>>
- > College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- >
- > From: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>>
- > Date: Tuesday, June 15, 2021 at 7:43 AM
- > To: Gargis, Timothy A <tim.gargis@pe.gatech.edu<mailto:tim.gargis@pe.gatech.edu>>, Clement, Crystal D

<crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu>>, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>>, Beyah, Raheem A

<rbeyah@coe.gatech.edu<mailto:rbeyah@coe.gatech.edu>>

> Subject: FW: Conference

> Crystal & Tim,

>

> Professor Manos Antonakakis would like to host a high-level conference at Georgia tech. Via this email, I am putting you in touch with him in order to assist.

> > Chaouki T Abdallah

>

> Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology

> 225 North Avenue, Carnegie Building

> Atlanta, Georgia 30332-0325

>

> From: Fox, Kelly <kelly.fox@gatech.edu<mailto:kelly.fox@gatech.edu>>

> Date: Tuesday, June 15, 2021 at 7:38 AM

> To: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>>, McLaughlin, Steven W

<swm@gatech.edu<mailto:swm@gatech.edu>>

> Subject: RE: Conference

> Please work with Crystal Clement – crystal.clement@pe.gatech.edu<mailto:crystal.clement@pe.gatech.edu> or Tim Gargis at tim.gargis@pe.gatech.edu<mailto:tim.gargis@pe.gatech.edu>.

>

> Thanks – Kelly

>

> From: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>>

> Sent: Monday, June 14, 2021 8:13 PM

> To: Fox, Kelly <kelly.fox@gatech.edu<mailto:kelly.fox@gatech.edu>>; McLaughlin, Steven W

<swm@gatech.edu<mailto:swm@gatech.edu>>

> Subject: Conference

>

> Kelly,

> This is about the DARPA conference I mentioned during last week's ELT. Can you please put him in touch with the appropriate folks who can help in conference management/arrangement?

> >

> Chaouki T. Abdallah

> Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology

> 225 North Avenue

> Atlanta, GA 30332-0325

>

> >

> From: Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>>

> Date: Monday, June 14, 2021 at 7:18 PM

> To: Beyah, Raheem A <ab207@gatech.edu<mailto:ab207@gatech.edu>>

> Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>>, McLaughlin, Steven W

<swm@gatech.edu<mailto:swm@gatech.edu>>

> Subject: Re:

> Much obliged, Raheem!

>

> On other news, I think I was able to convince GEN Stanton (<u>https://www.arcyber.army.mil/Leaders/Leaders-Article-View-Page/Article/2463463/brig-gen-paul-t-stanton/</u>) to show up at GT for the final EA PI meeting. He will be giving the keynote for the event. It would be nice if one of you could introduce him to the audience and welcome him at GT.

>

> The rumor has it that he will be the next head of NSA and USCC. It would be nice to think as GT being a friendly place for him.

>

> Chaouki/Raheem, I will be CCing in an email with DARPA EA PM so we can finalize the date for the event. Chaouki, we are still good to go after your discussion with Angel about hosting this event, correct?

- > Many thanks, Manos
- >

>

- >
- >_____

From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Saturday, July 10, 2021 3:32:35 AM

To: Beyah, Raheem A<rbeyah@coe.gatech.edu>

CC: Abdallah, Chaouki T<ctabdallah@gatech.edu>

Subject: Re: DARPA incubator at GT - update

Absolutely, gentlemen. Anytime you want.

I wish I could share what we did for DoD today. I will try to get someone high up to send you a "thank you" note.

Thanks, Manos From: Beyah, Raheem A <rbeyah@coe.gatech.edu> Sent: Thursday, July 8, 2021 3:52:18 PM To: Antonakakis, Manos <manos@gatech.edu> Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: Re: DARPA incubator at GT - update Got it. Thx for the update.

Traveling now. Let's grab drinks in a week or so to catch up. Will ping you. Thx.

> On Jul 7, 2021, at 11:11 AM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Gentlemen, one additional financial information I just found out from them.

>

> When the RFI comes in and if we decide to respond, they would expect our response to be between \$12M-\$15M per year. That should include cost for data, infrastructure, research and personnel. These are the budget levels they have right now, so they are much lower the \$30M per year we were talking about initially.

> I suspect that if this effort is successful after the first year, they will likely grow it bigger. Unclear how big this can get at the end.

>

> Thanks, Manos

- >
- > _
- > From: Antonakakis, Manos
- > Sent: Tuesday, July 6, 2021 7:12 PM
- > To: Abdallah, Chaouki T; Beyah, Raheem A
- > Subject: DARPA incubator at GT update
- >
- > Folks,
- >

> I just got off the phone with DARPA. The idea we have been floating around having GT become an innovation center around data analytics and machine learning looks like is getting traction with their leadership. They start asking questions about policy around data handling, and access to the data and computing infrastructure for future performers and transition partners of DARPA projects. Obviously, I was not able to give them any concrete answers, because I suspect GT legal and Chaouki's team will have to be deeply involved before any statements can be made on behalf of GT.

>

> Instead, I told them that theoretically everything is possible but in order for us to provide solid answers to DARPA I would like to see a formal RFI email from DARPA. Then we will know that this is as serious as it looks and we can justify the discussion with legal and Chaouki's team.

>

> Even after this RFI arrives, my advice is to have a meeting where we discuss our options. Certainly, their are many pros (funding, impact, prestige, etc.) but also cons (especially around risk of data loss) that we should seriously consider before replying to DARPA.

>

> While DARPA would prefer me leading this, I promise you that I will support and help anyone you want me to for the GT PI role.

>

> This is a heads up for an upcoming DARPA RFI.

>

> Thanks, Manos

ideas and the work I have done for the USG/DoD. For the first time since the moment I landed in Dulles international airport on October 1st of 2004, I had a serious discussion with my wife about moving back to Greece. Most importantly, however, I brought unnecessary attention from the DoJ in my working environment. This besides potentially hurting my reputation within GT (even if it is from an optics point of view) it also personally disappoints me greatly, because as a GT PhD student (2006-2012) and now as a faculty (2014-now) I always had as a goal to bring good news, recognition and success to GT --- and certainly not the attention of a special council.

If I make an attempt to come in your shoes, it would be absolutely reasonable for all of you to have questions about the risk that my research (and perhaps even myself) could bring to the Institute in the future. Therefore, when the dust settles I would like to have a discussion with all of you about the following two key open questions:

- First and foremost, how do you feel about my actions now that GT legal has a plethora of my emails and after I spent countless hours explaining to everyone why I did what I did at the time I did it? If you think I did something unethical (not necessarily illegal) I will work with GT to smoothly (see running projects, students, SOW deliverables, etc.) or otherwise transition out. You have my word on this.
- 2. Big data analysis and machine learning for attack attribution is the future. After all these events with this politically driven inquisition, I need to see if there is a place where I can keep working on this research space that I invented over the last 5 years through my work in EA. What I would like to know is how GT upper management and legal feels about my line of research after all these events? Is GT a place that would welcome more innovation in this space, or this is simply not your (read is as GT's) cup of tea anymore?

Finally, I will leave you with an anecdote and a thought. During one of my interviews with the Special Counsel prosecutor, I was asked point blank by Mr. DeFilippis, "Do you believe that DARPA should be instructing you to investigate the origins of a hacker (Guccifer_2.0) that hacked a political entity (DNC)?" Let that sync for a moment, folks. Someone hacked a political party (DNC, in this case), in the middle of an election year (2016), and the lead investigator of DoJ's special council would question whether US researchers working for DARPA should conduct investigations in this matter is "acceptable"! While I was tempted to say back to him "What if this hacker hacked GOP? Would you want me to investigate him then?", I kept my cool and I told him that this is a question for DARPA's director, and not for me to answer.

Steve, Chaouki and Ling-Ling; please, try to imagine a "United States of America" where investigations and prosecutions are determined by ideas and political believes. This has been tried before in human history and the results of it was forced labor and Gulags.

Folks, I strongly believe we will need this type of research and much more innovation in this space to preserve our democracy. This is factually true for a single yet fundamental reason: data driven scientific attribution is unbiased politically. Data belongs to no political party. Our nation's adversaries will keep attacking our country --- I am certain of this because their attacks simply work and are tremendously impactful to our society.

Thank you and have a great weekend.

PS. I am writing this email on a weekend because this is my first downtime since July 2nd when I received the subpoena. Thanks, Manos

From: "Nie, Ling-Ling" <linglingnie@gatech.edu>

Date: Friday, July 2, 2021 at 7:50 PM

To: "Antonakakis, Manos" <manos@gatech.edu>, "McLaughlin, Steven W" <swm@gatech.edu>, "Abdallah, Chaouki T" <ctabdallah@gatech.edu>, "Wasch, Kate" <kate.wasch@legal.gatech.edu>, "Lunon, Darryl" <dl91@gatech.edu>

Subject: Re: FGJ Subpoena for Manos Antonakakis

Hi Manos: Thanks for forwarding. I'm copying Kate's correct email address and adding Darryl. We will confer internally and come back to you early next week as there are some people who are out of the office for the holiday weekend that we will need to loop in.

From: Antonakakis, Manos <manos@gatech.edu>
Sent: Friday, July 2, 2021 2:39 PM
To: McLaughlin, Steven W; Abdallah, Chaouki T; kate.wesch@legal.gatech.edu; Nie, Ling-Ling
Subject: Fw: FGJ Subpoena for Manos Antonakakis
Hey Steve/Chaouki/Kate/Ling-Ling,

Hope you are doing great! Evidently I need to appear in front of a Grand Jury on July 15th. Any idea if I should talk with GT counsel before or if anyone from GT should be with me in this testimony?

This is a first for me so I am not sure what to do next.

From: Antonakakis, Manos <manos@gatech.edu> Sent on: Tuesday, June 16, 2020 1:24:04 PM To: McLaughlin, Steven W <swm@coe.gatech.edu> Subject: Re: Follow up from DOJ

Absolutely, Steve. I will make 5.30 work.

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: McLaughlin, Steven W <swm@coe.gatech.edu> Sent: Tuesday, June 16, 2020 8:14 AM To: Antonakakis, Manos Cc: McLaughlin, Steven W Subject: Re: Follow up from DOJ

Hi Manos Thanks - would be good to have a quick chat later today? Any chance 5:30p works for you? Thx Steve

Steve McLaughlin

Dean and Southern Company Chair

College of Engineering

Georgia Institute of Technology

Atlanta, GA 30332

Sent: Monday, June 15, 2020 1:46 PM

To: Wasch, Kate <kate.wasch@legal.gatech.edu>

Cc: McLaughlin, Steven W <swm@coe.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: Re: Follow up from DOJ

Hey Kate, thank you for your note.

I am very busy with EA for at least until the end of July. I was planning to take some time off after these major EA milestones ahead of us, and then I will be starting a new research project on 5G security with DARPA as the PI. This means I will have to handle contractual and other management issues around bootstrapping this new large DARPA research project. All these means that I will not be able to do potentially meaningful work (and this depends on what the actual ask from DoJ really is) until September for this investigator.

From: Antonakakis, Manos <manos@gatech.edu>

Now, neither member of my team nor me will talk to anyone *until* I get explicit direction from the Dean of COE and/or EVPR that GT wants my team to get involved in this investigation. Assuming we end up as GT helping out DoJ in this investigation, I would like to understand how GT (Steve and Chaouki) plans to protect me and my researchers when our attribution analysis become public and we have extreme people from either the far right (i.e., KKK) or the far left (i.e., Antifa) --- that do not like our findings for whatever reason --- come visiting us in our homes.

When I get answers to all these, then we can schedule a call with the DoJ investigator about what explicitly they want us to do. For that call, I would like someone from GT legal to be on the call, just in case the discussion goes down a path that could be potentially damaging for GT's reputation (i.e., the DoJ is borderline unethical or even illegal). It would not be fair for just me to be responsible for that.

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Wasch, Kate <kate.wasch@legal.gatech.edu> Sent: Monday, June 15, 2020 1:13 PM To: Dagon, David S; Antonakakis, Manos Subject: Follow up from DOJ

Good afternoon, gentlemen. DARPA confirmed in a telephone call with us that you may speak to the DOJ and their investigator. Please let me know if you are willing to do so.

Kate Wasch Chief Counsel Employment & Litigation Office of Legal Affairs Georgia Institute of Technology Atlanta, GA 30332-0495 (404)894-4812

Most communications to or from Georgia Tech employees are a public record and available to the public and the media upon request under Georgia's broad open records law. Therefore, this e-mail communication and any response may be subject to public disclosure. From: Antonakakis, Manos <manos@gatech.edu> Sent on: Friday, June 19, 2020 10:19:01 PM To: Wasch, Kate <kate.wasch@legal.gatech.edu> CC: McLaughlin, Steven W <swm@coe.gatech.edu>; Dagon, David S <dd92@gatech.edu> Subject: Re: Follow up from DOJ

Kate, many thanks for the update. I will let you know if I anyone reaches out to me or a member of my research team about this topic.

Have a great weekend!

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Wasch, Kate <kate.wasch@legal.gatech.edu> Sent: Friday, June 19, 2020 3:50 PM To: Antonakakis, Manos Cc: McLaughlin, Steven W; Dagon, David S Subject: RE: Follow up from DOJ

Thanks for your response, Manos. I have informed the US Attorney that you and David are not willing to speak with him at this time, and that Georgia Tech will not require you to do so, since we have not received a subpoena or formal request.

Please let me now if you have questions, or if anything further develops.

Kate

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Monday, June 15, 2020 1:47 PM To: Wasch, Kate <kate.wasch@legal.gatech.edu> Cc: McLaughlin, Steven W <swm@coe.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: Re: Follow up from DOJ

Hey Kate, thank you for your note.

I am very busy with EA for at least until the end of July. I was planning to take some time off after these major EA milestones ahead of us, and then I will be starting a new research project on 5G security with DARPA as the PI. This means I will have to handle contractual and other management issues around bootstrapping this new large DARPA research project. All these means that I will not be able to do potentially meaningful work (and this depends on what the actual ask from DoJ really is) until September for this investigator.

Now, neither member of my team nor me will talk to anyone *until* I get explicit direction from the Dean of COE and/or EVPR that GT wants my team to get involved in this investigation. Assuming we end up as GT helping out DoJ in this investigation, I would like to understand how GT (Steve and Chaouki) plans to protect me and my researchers when our attribution analysis become public and we have extreme people from either the far right (i.e., KKK) or the far left (i.e., Antifa) --- that do not like our findings for whatever reason --- come visiting us in our homes.

When I get answers to all these, then we can schedule a call with the DoJ investigator about what explicitly they want us

to do. For that call, I would like someone from GT legal to be on the call, just in case the discussion goes down a path that could be potentially damaging for GT's reputation (i.e., the DoJ is borderline unethical or even illegal). It would not be fair for just me to be responsible for that.

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Wasch, Kate <kate.wasch@legal.gatech.edu> Sent: Monday, June 15, 2020 1:13 PM To: Dagon, David S; Antonakakis, Manos Subject: Follow up from DOJ

Good afternoon, gentlemen. DARPA confirmed in a telephone call with us that you may speak to the DOJ and their investigator. Please let me know if you are willing to do so.

Kate Wasch Chief Counsel Employment & Litigation Office of Legal Affairs Georgia Institute of Technology Atlanta, GA 30332-0495 (404)894-4812

Most communications to or from Georgia Tech employees are a public record and available to the public and the media upon request under Georgia's broad open records law. Therefore, this e-mail communication and any response may be subject to public disclosure.

From: Wasch, Kate <kate.wasch@legal.gatech.edu> Sent on: Thursday, May 21, 2020 7:26:59 PM To: Antonakakis, Manos <manos@gatech.edu>; CC: Connolly, Robert <robert.connolly@police.gatech.edu> Subject: RE: Follow up to conversation

Thanks, Manos. That's a very helpful explanation. I will let you know what we learn tomorrow.

-----Original Message-----From: Antonakakis, Manos <manos@gatech.edu> Sent: Thursday, May 21, 2020 11:51 AM To: Wasch, Kate <kate.wasch@legal.gatech.edu>; Cc: Connolly, Robert <robert.connolly@police.gatech.edu> Subject: Re: Follow up to conversation

Kate, there are many issues here.

First and foremost for me is that I am not exactly sure what the US Attorney is looking for. If they told you that "they were interested in factual information (e.g., identifying people who discovered the back channel communications)", that is something that is outside the scope of our research program with DARPA and what I am willing to do as academic. Me and my team at GT are here to advance the science of attack attribution, not to find particular individuals. That is simply not what we do.

Now, as far as I am concerned, I need (as Primary investigator) to deliver the DARPA project to the USG in under a year. That means, I need to make sure that GT delivers the Statement of Work (SOW) for which we are liable for. If the US Attorney, DoJ or any other part of the USG wants me and my team to help them with a problem on the 11th hour of my DARPA project, at the very least the following three things needs to happen:

- DARPA not only needs to be OK with this, but they will have to send us something in writing where we are not under the gun to deliver the current SOW on time, and

- I would like to get paid (as a research lab in GT) for my effort, and

- The GT leadership will have to be OK with me doing something for the US Attorney, DoJ or any other part of the USG. I clearly cannot make that call.

So, the attitude "OK, just do this for us", from where I sit makes no sense at all. I cannot just do stuff for people. And actually, when it comes to the DARPA project I cannot say anything to anyone without DARPA's approval. More importantly, when I do something that would result in a presentation or a paper that would reach the public domain, GT has contractual obligations to go through the DISTAR inspection system where DARPA could flat out block or alter what I am about to say or publish.

Therefore, what the US Attorney is asking us to do with the current contractual obligations looks to me to be illegal. That is, if I (or my team) do or say anything about this issue (without DARPA's approval _at the very least_) we would be in clear violation of our DARPA contract.

Chief, you are CCed just as an FYI-

Thanks,

Manos Antonakakis | Associate Professor | manos@gatech.edu School of Electrical and Computer Engineering Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Wasch, Kate <kate.wasch@legal.gatech.edu> Sent: Thursday, May 21, 2020 11:17 AM To: Antonakakis, Manos; Dagon, David S

Subject: Follow up to conversation

David, thanks for making yourself available for a conversation earlier this week. From our conversation, I understand that the work the US Attorney is interested in is work GT is performing for DARPA, and the research is ongoing. Is that correct? I further understand that you are concerned primarily about the research you are doing being shared publicly. If I am wrong about that, please let me know as soon as possible.

I understood from the US Attorney that they were interested in factual information (e.g., identifying people who discovered the back channel communications) rather than the technical research you are performing. From your previous discussions with them, is that correct? I have another call with the US Attorney tomorrow afternoon.

Kate Wasch Chief Counsel Employment & Litigation Office of Legal Affairs Georgia Institute of Technology Atlanta, GA 30332-0495 (404)894-4812

Most communications to or from Georgia Tech employees are a public record and available to the public and the media upon request under Georgia's broad open records law. Therefore, this e-mail communication and any response may be subject to public disclosure.

From: Keromytis, Angelos D <angelos@gatech.edu> Sent on: Wednesday, May 13, 2020 7:13:32 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Egerstedt, Magnus <magnus.egerstedt@ece.gatech.edu>; McLaughlin, Steven W <swm@coe.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: Re: HR001120S0026-OPS-5G-FP-010-Notification Letter

Thanks and congrats to you as well :-)

> On May 13, 2020, at 2:10 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Some good news in these crazy times. Attached please find the notice for a contract award selection from DARPA. This will likely be a new ~\$7.3M/4y project under the title PRogrammable INfrastructure for CounterIng Pugnacious Adversaries on a Large Scale (PRINCIPALS) on the OPS-5G program at DARPA I2O.

>

> *ALL* credit should go to Angelos for conceptualizing the idea and executing the proposal. Kudos, Angele!

>

> —

> Manos Antonakakis | Associate Professor | manos@gatech.edu

- > School of Electrical and Computer Engineering
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- > >
- > From: OPS-5G <ops-5g@darpa.mil>
- > Sent: Wednesday, May 13, 2020 1:58 PM
- > To: Antonakakis, Manos <manos@gatech.edu>
- > Cc: OPS-5G <ops-5g@darpa.mil>
- > Subject: HR001120S0026-OPS-5G-FP-010-Notification Letter
- >
- >
- > Dear Dr. Antonakakis,
- >
- >
- >

> Please see the attached file regarding your proposal submission (HR001120S0026-OPS-5G-FP-010) that was submitted to the Open Programmable Secure 5G (OPS-5G) solicitation, HR001120S0026.

- >
- >
- >
- > Regards,
- >
- >
- >
- > DARPA/I2O
- > <FP010.pdf>

From: Abdallah, Chaouki T <ctabdallah@gatech.edu> Sent on: Wednesday, May 13, 2020 7:12:36 PM To: Antonakakis, Manos <manos@gatech.edu> CC: Egerstedt, Magnus <magnus.egerstedt@ece.gatech.edu>; Keromytis, Angelos D <angelos@gatech.edu>; McLaughlin, Steven W <swm@coe.gatech.edu> Subject: Re: HR001120S0026-OPS-5G-FP-010-Notification Letter

Awesome! Stay safe and keep us safe.

Chaouki T. Abdallah Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology

> On May 13, 2020, at 14:10, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Some good news in these crazy times. Attached please find the notice for a contract award selection from DARPA. This will likely be a new ~\$7.3M/4y project under the title PRogrammable INfrastructure for CounterIng Pugnacious Adversaries on a Large Scale (PRINCIPALS) on the OPS-5G program at DARPA I2O.

>

> *ALL* credit should go to Angelos for conceptualizing the idea and executing the proposal. Kudos, Angele!

>

> —

> Manos Antonakakis | Associate Professor | manos@gatech.edu

- > School of Electrical and Computer Engineering
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- >
- > ___

- > To: Antonakakis, Manos <manos@gatech.edu>
- > Cc: OPS-5G <ops-5g@darpa.mil>
- > Subject: HR001120S0026-OPS-5G-FP-010-Notification Letter
- >
- >
- > Dear Dr. Antonakakis,
- >
- >
- >

> Please see the attached file regarding your proposal submission (HR001120S0026-OPS-5G-FP-010) that was submitted to the Open Programmable Secure 5G (OPS-5G) solicitation, HR001120S0026.

- >
- >
- >
- > Regards,
- >
- >
- >
- > DARPA/I2O
- > <FP010.pdf>

> From: OPS-5G <ops-5g@darpa.mil>

> Sent: Wednesday, May 13, 2020 1:58 PM

From: McLaughlin, Steven W <swm@coe.gatech.edu> Sent on: Wednesday, May 13, 2020 8:21:24 PM To: Keromytis, Angelos D <angelos@gatech.edu>; Antonakakis, Manos <manos@gatech.edu> CC: Egerstedt, Magnus <magnus.egerstedt@ece.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu>; McLaughlin, Steven W <swm@coe.gatech.edu> Subject: Re: HR001120S0026-OPS-5G-FP-010-Notification Letter

Awesome - thanks to you both!!!!

All the best Steve

Steve McLaughlin Dean and Southern Company Chair College of Engineering Georgia Institute of Technology Atlanta, GA 30332

On 5/13/20, 2:13 PM, "Keromytis, Angelos D" <angelos@gatech.edu> wrote:

Thanks and congrats to you as well :-)

> On May 13, 2020, at 2:10 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Some good news in these crazy times. Attached please find the notice for a contract award selection from DARPA. This will likely be a new ~\$7.3M/4y project under the title PRogrammable INfrastructure for CounterIng Pugnacious Adversaries on a Large Scale (PRINCIPALS) on the OPS-5G program at DARPA I2O.

>

> *ALL* credit should go to Angelos for conceptualizing the idea and executing the proposal. Kudos, Angele!

> > —

- > Manos Antonakakis | Associate Professor | manos@gatech.edu
- > School of Electrical and Computer Engineering
- > Georgia Institute of Technology
- > FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668
- > >
- > From: OPS-5G <ops-5g@darpa.mil>
- > Sent: Wednesday, May 13, 2020 1:58 PM
- > To: Antonakakis, Manos <manos@gatech.edu>
- > Cc: OPS-5G <ops-5g@darpa.mil>
- > Subject: HR001120S0026-OPS-5G-FP-010-Notification Letter
- >
- >

- >
- >
- >

> Please see the attached file regarding your proposal submission (HR001120S0026-OPS-5G-FP-010) that was submitted to the Open Programmable Secure 5G (OPS-5G) solicitation, HR001120S0026.

>

> Dear Dr. Antonakakis,

- >
- >
- > Regards,
- >
- >
- >
- > DARPA/I2O
- > <FP010.pdf>

From: Abdallah, Chaouki T<ctabdallah@gatech.edu>

Sent on: Tuesday, June 15, 2021 1:11:14 AM

- To: Antonakakis, Manos<manos@gatech.edu>; Beyah, Raheem A<ab207@gatech.edu>
- CC: McLaughlin, Steven W<swm@gatech.edu>

Subject: Re: Letter of Resignation

We are. OK to do it. I'll ping the appropriate folks again to have them contact you. Chaouki T. Abdallah Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology 225 North Avenue Atlanta, GA 30332-0325

From: Antonakakis, Manos <manos@gatech.edu>
Date: Monday, June 14, 2021 at 7:18 PM
To: Beyah, Raheem A <ab207@gatech.edu>
Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu>, McLaughlin, Steven W <swm@gatech.edu>
Subject: Re: Letter of Resignation

Much obliged, Raheem!

On other news, I think I was able to convince GEN Stanton (<u>https://www.arcyber.army.mil/Leaders/Leaders-Article-View-Page/Article/2463463/brig-gen-paul-t-stanton/</u>) to show up at GT for the final EA PI meeting. He will be giving the keynote for the event. It would be nice if one of you could introduce him to the audience and welcome him at GT.

The rumor has it that he will be the next head of NSA and USCC. It would be nice to think as GT being a friendly place for him.

Chaouki/Raheem, I will be CCing in an email with DARPA EA PM so we can finalize the date for the event. Chaouki, we are still good to go after your discussion with Angel about hosting this event, correct?

Many thanks, Manos

From: Beyah, Raheem A <ab207@gatech.edu> Sent: Monday, June 14, 2021 6:52 PM To: Antonakakis, Manos Cc: Abdallah, Chaouki T; McLaughlin, Steven W Subject: Re: Letter of Resignation

We're working on this!

On Jun 11, 2021, at 2:16 PM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

Gentlemen, I was able to reach out to the other member of my team (Dr. Lever) who is equally critical to my team. He is effectively a "mini-me", as he is the only one that can do things at my level of rigor and quality. Sadly, the news is equally bad. He has been talking with another company on the west coast, primarily for financial reasons. He is 37, and needs to be compensated better --- totally reasonable. After Chaz witnessing me fighting GT for a year, and realizing that he will never get remotely closely paid to what he deserves, he decided to answer the emails he has been receiving from recruiters. The salary that he expects to get when the interviews are done is around \$270K. I should point out that after a 16 month fight with GT processes I was able to bring him up to \$150K.

As a final favor, I asked him to not accept any offers and give me a month to try one last time to bring him up to \$220K as my new Director of Research for the COEUS center. This is a salary that he clearly deserves not because of the new programs he brought in recently, but also for all the help he is providing me in managing the research team and other DARPA contracts.

Raheem, I will have my people reach out to you so you can link them with your team and help us in this last effort to retain Chaz at GT. If we cannot retain Chaz, I will then know for a fact that I cannot scale my operations at GT.

Not asking for any favors here. I am just trying to see if GT can react as a system when critical actions need to be done. If the system cannot react, then it would be risky to bring on new funds and fail in delivering what we promised in the SOWs.

Worth pointing out that I am not surprised by all these. Was able to read the tea leaves more than a year ago. What we do in my team is unique, special, and my people will be approached to be hired by big companies in the industry. In my role, I can only keep my people happy, read the problems ahead of time and have funds available to solve them. The GT system will then have to give me the rest of the tools and processes to grow an execute.

Thanks, Manos

From: Beyah, Raheem A <ab207@gatech.edu<mailto:ab207@gatech.edu>> Date: Thursday, June 10, 2021 at 5:20 PM To: Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu<mailto:ctabdallah@gatech.edu>>, McLaughlin, Steven W <swm@gatech.edu<mailto:swm@gatech.edu>> Subject: Re: Letter of Resignation So sorry to see this!

Let's work on the strategy we discussed earlier. I'm sure we can move things forward.

Best,

Raheem

On Jun 10, 2021, at 4:23 PM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

The irony in this is stanning. We just talked about Logan and the need for retention this morning.

Now, I just lost the guy I as planning to have as my director for the engineering work of the center. It took us a year to give him 9% increase on he salary. He got an offer for 40% more on his salary. Couldn't be a worst timing for all these.

Maybe growing is not the think we should do given the restrains we have from USG.

Thanks, Manos

From: O'Hara, Logan <logan.ohara@gatech.edu<mailto:logan.ohara@gatech.edu>> Date: Thursday, June 10, 2021 at 4:17 PM To: Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> Subject: Letter of Resignation Manos,

After a lot of thought and deliberation I've decided to accept an offer from another company and offer my resignation from GT. My last day will be June 25. This was not an easy decision for me to make, and I did not take it lightly. I've never known anything outside of Georgia Tech (and Astrolavos) professionally, but this opportunity is a very good fit for me and an excellent step into the next stage of my career.

From: Beyah, Raheem A <rbeyah@coe.gatech.edu> Sent on: Tuesday, June 15, 2021 1:13:31 AM To: Antonakakis, Manos <manos@gatech.edu> CC: Beyah, Raheem A <rbeyah@coe.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu>; McLaughlin, Steven W <swm@gatech.edu> Subject: Re: Letter of Resignation

Awesome!

> On Jun 14, 2021, at 7:18 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

>

> Much obliged, Raheem!

>

> On other news, I think I was able to convince GEN Stanton (<u>https://www.arcyber.army.mil/Leaders/Leaders-Article-View-Page/Article/2463463/brig-gen-paul-t-stanton/</u>) to show up at GT for the final EA PI meeting. He will be giving the keynote for the event. It would be nice if one of you could introduce him to the audience and welcome him at GT.

> The rumor has it that he will be the next head of NSA and USCC. It would be nice to think as GT being a friendly place for him.

>

> Chaouki/Raheem, I will be CCing in an email with DARPA EA PM so we can finalize the date for the event. Chaouki, we are still good to go after your discussion with Angel about hosting this event, correct?

>

> Many thanks, Manos

- >
- >
- >

- > Sent: Monday, June 14, 2021 6:52 PM
- > To: Antonakakis, Manos
- > Cc: Abdallah, Chaouki T; McLaughlin, Steven W
- > Subject: Re: Letter of Resignation
- >
- > We're working on this!
- >

> On Jun 11, 2021, at 2:16 PM, Antonakakis, Manos <manos@gatech.edu<mailto:manos@gatech.edu>> wrote:

>

> Gentlemen, I was able to reach out to the other member of my team (Dr. Lever) who is equally critical to my team. He is effectively a "mini-me", as he is the only one that can do things at my level of rigor and quality. Sadly, the news is equally bad. He has been talking with another company on the west coast, primarily for financial reasons. He is 37, and needs to be compensated better --- totally reasonable. After Chaz witnessing me fighting GT for a year, and realizing that he will never get remotely closely paid to what he deserves, he decided to answer the emails he has been receiving from recruiters. The salary that he expects to get when the interviews are done is around \$270K. I should point out that after a 16 month fight with GT processes I was able to bring him up to \$150K.

>

> As a final favor, I asked him to not accept any offers and give me a month to try one last time to bring him up to \$220K as my new Director of Research for the COEUS center. This is a salary that he clearly deserves not because of the new programs he brought in recently, but also for all the help he is providing me in managing the research team and other DARPA contracts.

>

> Raheem, I will have my people reach out to you so you can link them with your team and help us in this last effort to retain Chaz at GT. If we cannot retain Chaz, I will then know for a fact that I cannot scale my operations at GT.

>

> Not asking for any favors here. I am just trying to see if GT can react as a system when critical actions need to be done. If the system cannot react, then it would be risky to bring on new funds and fail in delivering what we promised in the

> From: Beyah, Raheem A <ab207@gatech.edu>

From:Abdallah, Chaouki T<ctabdallah@gatech.edu>Sent on:Wednesday, January 26, 2022 9:10:05 PMTo:Antonakakis, Manos<manos@gatech.edu>; McLaughlin, Steven W<swm@gatech.edu>Subject:Re:Our reputation

Of course!!!! I should have known that... Chaouki T. Abdallah Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology EA: Lisa Tuttle, <u>ltuttle@gatech.edu</u>, 404-894-8884

From: Antonakakis, Manos <manos@gatech.edu>
Date: Wednesday, January 26, 2022 at 4:08 PM
To: Abdallah, Chaouki T <ctabdallah@gatech.edu>, McLaughlin, Steven W <swm@gatech.edu>
Subject: Re: Our reputation

Thanks, Chaouki. The name was inspired from the Antikythera Mechanism, often referred as the first computing device ever discovered.

https://en.m.wikipedia.org/wiki/Antikythera_mechanism Manos

From: Abdallah, Chaouki T <ctabdallah@gatech.edu> Sent: Wednesday, January 26, 2022 4:02:23 PM To: Antonakakis, Manos <manos@gatech.edu>; McLaughlin, Steven W <swm@gatech.edu> Subject: Re: Our reputation Awesome! Your reputation precedes you.... And BTW, what does "Antikythera" mean? Chaouki T. Abdallah Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology EA: Lisa Tuttle, <u>Ituttle@gatech.edu</u>, 404-894-8884

From: Antonakakis, Manos <manos@gatech.edu>
Date: Wednesday, January 26, 2022 at 4:00 PM
To: McLaughlin, Steven W <swm@gatech.edu>, Abdallah, Chaouki T <ctabdallah@gatech.edu>
Subject: Our reputation

Steve and Chaouki, the most important people in the community never stop believing and supporting us. Here is an example of their support. This letter will go towards our big DARPA proposal, which we will submit this week. Thanks, Manos

From: Carothers, Matt (CCI-Atlanta) <Matt.Carothers@cox.com>
Sent: Wednesday, January 26, 2022 15:51
To: Keromytis, Angelos D; Antonakakis, Manos; Mitchell, Michael F
Cc: Johnson, Velvet (CCI-Atlanta); Trickey, Linda (CCI-Atlanta-LD); Harvie, Christopher; Jonathan Cain
Subject: RE: SOW / Technical Analysis / Reps & Certs for GT review
And here's the LOI

```
> Executive Vice President for Research
> Georgia Institute of Technology
>
>> On Feb 12, 2021, at 13:51, Keromytis, Angelos D <a href="mailto:angelos@gatech.edu">angelos@gatech.edu</a>> wrote:
>>
>> Chaouki, Raheem,
>> I hope you're doing well!
>>
>> Just wanted to bring this to your attention, not so much because of the amount involved
(~$1.75M), but because this was led by Chaz Lever, a research scientist in our center. (Chaz turned
down a tenure-track position to stay with us, after he got his PhD.)
>>
>> This (training, retaining, and developing Research Scientists who care about research+impact) is a
model we are heavily pursuing at our center, and it is predicated upon (and only possible because of)
our reputation.
>> Best,
>> -Angelos
>>
>>
>> Begin forwarded message:
>>>
>>> From: "Lever, Charles C" <<u>chazlever@gatech.edu</u>>
>>> Subject: Fwd: HR001118S0057-Office-Wide-BAA-FP-074 - Notification Letter
>>> Date: February 12, 2021 at 11:43:16 AM EST
>>> To: "Keromytis, Angelos D" <angelos@gatech.edu>, "Antonakakis, Manos" <manos@gatech.edu>,
"Perdisci, Roberto" <perdisci@gatech.edu>
>>> Cc: "Mitchell, Michael F" <<u>michael.mitchell@ece.gatech.e</u>du>
>>>
>>> Hi Everyone,
>>>
>>> We've received official notification that our DARPA proposal was accepted. Here's the letter
notifying us of the good news. :-)
>>>
>>>> Begin forwarded message:
>>>>
>>>> From: HR001118S0057 <HR001118S0057@darpa.mil>
>>>> Subject: HR001118S0057-Office-Wide-BAA-FP-074 - Notification Letter
>>>> Date: February 8, 2021 at 11:24:56 AM EST
>>>> To: "clever3@gatech.edu" <clever3@gatech.edu>
>>>> Cc: HR001118S0057 <<u>HR001118S0057@darpa.mil</u>>, "Sibble, Dan" <<u>Dan.Sibble@osp.gatech.edu</u>>
>>>>
>>>> Dear Dr. Lever,
>>>>
>>>> Please see the attached file regarding your proposal submission (HR001118S0057-Office-Wide-
BAA-FP-074) that was submitted to the Information Innovation Office (I2O) Office-wide solicitation,
HR001118S0057.
>>>>
>>>> Regards,
>>>> DARPA/I2O
>>>>
>>>
>> <FP-074 signed.pdf>
```

From: McLaughlin, Steven W<swm@gatech.edu>

Sent on: Wednesday, June 2, 2021 1:26:05 PM

To: Antonakakis, Manos<manos@gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu>

CC: Burr, Robbie L<robbie.burr@provost.gatech.edu>; Tuttle, Lisa<ltuttle@gatech.edu>

Subject: Re: Planning ahead for the new project

Hi Manos

Yes let's catch up – I am on vacation this week, let's try to squeeze in something next week? Best Steve

Steve McLaughlin Provost and Executive Vice President for Academic Affairs Georgia Institute of Technology **********

From: "Antonakakis, Manos" <manos@gatech.edu>

Date: Tuesday, June 1, 2021 at 9:51 AM

To: "Abdallah, Chaouki T" <ctabdallah@gatech.edu>, "McLaughlin, Steven W" <swm@gatech.edu>

Subject: Planning ahead for the new project

Gentlemen, hope you are doing great!

As I am preparing the budget/SOW for the new upcoming project (ETA: late 2021 or early 2020), I would like to hear your thoughts on a couple of open items around how I will structure this project. The project unfortunately grew significantly bigger (\$25M for 3 years, with an option for 2 additional years after that) than what I originally thought it would be and I am afraid that without careful planning we will come across issues when it comes to hiring, hardware hosting availability and the datasets we will have to procure for the entire program.

So, can I "steal" 30 minutes of your time to run you through the issues I see ahead of us, and pick your brain on how we could solve them? I would rather have this meeting now that I am planning the entire project rather after we have signed contracts/SOW with DARPA.

Thanks, Manos

From: McLaughlin, Steven W<sm140@gatech.edu>

Sent on: Tuesday, October 26, 2021 12:58:22 PM

To: Antonakakis, Manos<manos@gatech.edu>

Subject: Re: Proactive document and communication classification for new DARPA project

Am following up *********

Steve McLaughlin Provost and Executive Vice President for Academic Affairs



From: "Antonakakis, Manos" <manos@gatech.edu>

Date: Monday, October 25, 2021 at 1:36 PM

To: "Nie, Ling-Ling" < linglingnie@gatech.edu>

Cc: "Abdallah, Chaouki T" <ctabdallah@gatech.edu>, "McLaughlin, Steven W" <swm@gatech.edu> **Subject:** Proactive document and communication classification for new DARPA project Hey Ling-Ling,

You will probably think I am losing it after this email, but I have to ask.

As Chaouki and Steve might have communicated to you already, I am in the process of writing a proposal for a big DARPA project. This project will have the same (if not more) sensitivities as Enhanced Attribution had.

In order to avoid any of the "misunderstandings" we had with EA (i.e., external to GT parties that want to get access to my research and communications), is there a way I can mark my documents and emails related to this topic as (lack of any better term) "sensitive or national security related"? This way, if anyone need these information they can go to the sponsor instead of coming to us.

Just trying to think ahead and protect myself, my team, GT and the national security. Thanks,

Manos Antonakakis, Ph.D. |manos@gatech.edu

College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology From: Smith, Ashley<ashley.smith@osp.gatech.edu>

Sent on: Monday, December 13, 2021 3:49:45 PM

- To: 'Antonakakis, Manos'<manos@gatech.edu>
- CC: Mitchell, Michael F<michael.mitchell@ece.gatech.edu>; Keromytis, Angelos D<angelos@gatech.edu>; Lever, Charles C<chazlever@gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu>; McLaughlin, Steven W<swm@gatech.edu>; Sibble, Dan<Dan.Sibble@osp.gatech.edu>

Subject: RE: SMOKE DARPA proposal

Hi Manos, nice to meet you as well. Let me know how I can be of assistance with this submittal. Ashley

From: Antonakakis, Manos <manos@gatech.edu>
Sent: Tuesday, December 7, 2021 3:03 PM
To: Sibble, Dan <Dan.Sibble@osp.gatech.edu>; Smith, Ashley <ashley.smith@osp.gatech.edu>
Cc: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>; Keromytis, Angelos D <angelos@gatech.edu>; Lever, Charles C <chazlever@gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu>; McLaughlin, Steven W <swm@gatech.edu>
Subject: Re: SMOKE DARPA proposal
Great, thanks Dan!
Ashley pleased to virtually meet you!
Manos

From: Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>>
Sent: Tuesday, December 7, 2021 3:00:48 PM
To: Antonakakis, Manos <<u>manos@gatech.edu</u>>; Smith, Ashley <<u>ashley.smith@osp.gatech.edu</u>>
Cc: Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>; Keromytis, Angelos D <<u>angelos@gatech.edu</u>>; Lever, Charles C <<u>chazlever@gatech.edu</u>>; Abdallah, Chaouki T <<u>ctabdallah@gatech.edu</u>>; McLaughlin, Steven W < <<u>swm@gatech.edu</u>>; Moltaughlin, Steven W <</p>
Subject: RE: SMOKE DARPA proposal Good Afternoon Manos,

Thanks for your email. Please be advised that Ashley Smith (cc'd) is now the corresponding GTRC Contracting Officer for the College Engineering's DARPA programs. Ashley will be happy to assist you with this effort.

Best,

Dan

Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

-----Original Message-----From: Antonakakis, Manos <<u>manos@gatech.edu</u>> Sent: Tuesday, December 7, 2021 1:12 PM To: Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> Cc: Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>; Keromytis, Angelos D <<u>angelos@gatech.edu</u>>; Lever, Charles C <<u>chazlever@gatech.edu</u>>; Abdallah, Chaouki T <<u>ctabdallah@gatech.edu</u>>; McLaughlin, Steven W < <u>swm@gatech.edu</u>> Subject: SMOKE DARPA proposal Hey Dan, hope you are doing great.

This is a heads up that the COEUS center will be submitting a proposal for at least TA2 (and maybe TA1) of the DARPA SMOKE program, and I will be the PI.

https://sam.gov/opp/8832e2b8d9864169a234834eea89e5f1/view

We are currently working to finalize the list of subcontractors we will have in our team. You will know when we finalized this list.

The upper management of the Institute is aware of our intention to submit this proposal. Because we envision the budget of this program to be kind of big (~\$25M for 3.5 years), I would appreciate your close collaboration with Michael to make sure that the Volume 2 of is rock solid.

Proposals are due end of January.

Thanks, Manos

kyle.smith@security.gatech.edu >; Arnold, Paul < paul.arnold@gtri.gatech.edu > Cc: Pavadore, Anita H. < anita.pavadore@gtri.gatech.edu >; Cyber Security Compliance Team < compliance@security.gatech.edu >; Barney, Diane < diane.barney@osp.gatech.edu > Subject: Re: SSP for Royal

This is for Darpa-Royal. Roberta Burke is read into this project.

Thank you,

<

Chris M. Roberts Techniques Branch Chief Georgia Tech Research Institute CIPHER | Techniques Branch 404.407.8378 (office) 404.844.8236 (cell)

From: "Yarbrough, Lucy" < Lucy.Yarbrough@osp.gatech.edu > Date: Thursday, July 30, 2020 at 3:59 PM To: "'Smith, Kyle L'" < kyle.smith@security.gatech.edu >, "Arnold, Paul" < paul.arnold@gtri.gatech.edu > Cc: "Roberts, Chris M." < Chris.Roberts@gtri.gatech.edu >, "Pavadore, Anita H." < anita.pavadore@gtri.gatech.edu >, Cyber Security Compliance Team < compliance@security.gatech.edu >, "Barney, Diane"

<

> Cc: Roberts, Christopher M
<
Chris.Roberts@gtri.gatech.edu
>;
Pavadore, Anita M <
anita.pavadore@gtri.gatech.edu
>
Subject: SSP for Royal

Hey Kyle,

GTRI will start a new research project called Royal ~ Oct 2020. We will be working with Campus and Professor Angelos Keromytis in ECE.

We need a System Security Plan (SSP) to deliver to our Sponsor (DARPA). Additionally, I understand we'll need a Report on Compliance (ROC).

Can you help us with these documents or point me to the right person? Thanks Kyle.

Best,

Paul

Paul J. Arnold Associate Division Chief, Network Vulnerability Division Cybersecurity, Information Protection, and Hardware Evaluation Research (CIPHER) Laboratory Georgia Tech Research Institute Work: 404.407.8418 Mobile: 858.335.4303 From: Abdallah, Chaouki T<ctabdallah@gatech.edu>

Sent on: Monday, August 24, 2020 5:11:13 PM

To: Antonakakis, Manos<manos@gatech.edu>; McLaughlin, Steven W<swm@coe.gatech.edu>; Egerstedt, Magnus<magnus.egerstedt@ece.gatech.edu>

CC: Keromytis, Angelos D<angelos@gatech.edu>

Subject: Re: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse

??

Chaouki T. Abdallah Professor of Electrical & Computer Engineering Executive Vice President for Research Georgia Institute of Technology 225 North Avenue Atlanta, GA 30332-0325

> From: "Antonakakis, Manos" <manos@gatech.edu> Date: Monday, August 24, 2020 at 12:02 PM
> To: "McLaughlin, Steven W" <swm@coe.gatech.edu>, "Abdallah, Chaouki T"
> <ctabdallah@gatech.edu>, "Egerstedt, Magnus" <magnus.egerstedt@ece.gatech.edu>
> Cc: "Keromytis, Angelos D" <angelos@gatech.edu>
> Subject: Fwd: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse
> Steve/Chaouki, I do not need you to do anything. I am just trying to get OSP to work with us on this.
> While it is sad that I have to name-drop you in this email, but your names might just help us get some answers.
> Thanks,
> Manos

From: "Antonakakis, Manos" <<u>manos@gatech.edu</u>> Subject: Re: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse

Date: August 24, 2020 at 11:56:45 AM EDT

To: "Mitchell, Michael F" <<u>michael.mitchell@ece.gatech.edu</u>>

Cc: "Sibble, Dan J" <<u>Dan.Sibble@osp.gatech.edu</u>>, "Jackson, Timothy S" <

timothy.jackson@osp.gatech.edu>, "Pilcher, Steven L" <<u>Steve.Pilcher@osp.gatech.edu</u>>,

"Egerstedt, Magnus" <<u>magnus.egerstedt@ece.gatech.edu</u>>, "Melkote, Siri G" <

siri.melkote@ece.gatech.edu>, "Butler, Angel D" <angel.butler@osp.gatech.edu>,
"Custodio, Victoria N" <<u>victoria.custodio@osp.gatech.edu</u>>, "McLaughlin, Steven W" <
swm@coe.gatech.edu>, "Abdallah, Chaouki T" <<u>ctabdallah@gatech.edu</u>>

Thanks Michael for the update. There is a major event (Hackathon) in November that I will need Roberto's help with. Our success in this Hackathon will secure our funding for Phase III of the HACCS project (next 18 months). We need these funds for many obvious reasons, some of which are, so we will not have to terminate the GRAs from our F1 international students.

- This has been dragging on and on for many months. If Roberto (as UGA) is not under contract by October, then I will have to step in, and that will impact greatly (in a pure negative sense) a number of new funding activities I am working on.
- I need a hard deadline for this so I can mitigate the risk. Can someone give me that? If we cannot do it, I need to explicitly know why this cannot be done, why we have not been informed about it sooner (so I can plan accordingly) and I would like to see the exact policies in places that blocks us from doing this sub contract with UGA (given the fact that Roberto is an expert on this project and part of it for the last two years).

A non-trivial amount of time was spent to fix HACCS, not only from me but from people in

this thread. My reputation as a researcher and PI is on the line. Not intending to fail in the eyes of the sponsor without having a clear understanding who's fault this is internally at GT.

Steve, Chaouki; this is just an FYI-Thanks, Manos

> On Aug 24, 2020, at 11:42 AM, Mitchell, Michael F < michael.mitchell@ece.gatech.edu> wrote: Manos, I am working with Tim, Dan, and Steve to get this done. The last document they need is the justification for selection and price reasonableness. I know that seems strange given that this is really more of a project continuation than a "new" subaward, but it is important for the contract auditors on this project. I will have this to them in a few moments and Tim has promised to make this a priority as soon as it goes through. Dan has promised to work out the issues with his contracting counterpart with the sponsor as well. Ideally this shouldn't take longer than a few days, but there are lots of moving parts. I have spoken to Roberto and he is very sympathetic and understanding and has been very helpful, and is aware of the delays. Going forward I think we have a resolution in place for this to avoid this issue for any other subagreements. Michael From: Antonakakis, Manos < manos@gatech.edu> Sent:Monday, August 24, 2020 11:31 AM To:Sibble, Dan J < Dan.Sibble@osp.gatech.edu> Cc:Mitchell, Michael F < michael.mitchell@ece.gatech.edu>; Jackson, Timothy S <timothy.jackson@osp.gatech.edu>; Pilcher, Steven L < Steve.Pilcher@osp.gatech.edu>; Egerstedt, Magnus <</p> magnus.egerstedt@ece.gatech.edu>; Melkote, Siri G < siri.melkote@ece.gatech.edu>; Butler, Angel D <</pre> angel.butler@osp.gatech.edu>; Custodio, Victoria N < victoria.custodio@osp.gatech.edu> Subject: Re: Subaward - GATech : DARPA : Behavioral Engine for Detecting **Network Abuse** Can I please get an update on this? When this will be done? Manos On Aug 18, 2020, at 8:00 PM, Sibble, Dan < <u>Dan.Sibble@osp.gatech.edu</u>> wrote: Michael, et al, I will need the documents referenced by Tim (cost/price analysis and adequate selection memo) as soon as completed. These docs are necessary for the consent

completed. These docs are necessary for the conse review/evaluation. Thanks, Dan Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

From: Jackson, Timothy Sent:Tuesday, August 18, 2020 6:04 PM To:Mitchell, Michael F < michael.mitchell@ece.gatech.edu>; Pilcher, Steve < Steve.Pilcher@osp.gatech.edu>; Sibble, Dan <</pre> Dan.Sibble@osp.gatech.edu> Cc:Antonakakis, Manos <manos@gatech.edu>; Egerstedt, Magnus < <u>magnus.egerstedt@ece.gatech.edu</u> >; Melkote, Siri G <<u>siri.melkote@ece.gatech.edu</u>>; Butler, Angel <angel.butler@osp.gatech.edu>; Custodio, Victoria < victoria.custodio@osp.gatech.edu > Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Good Evening All, I will more than likely process this award when it is finally submitted in CIS. The past effort (D8553-S2) with Dr. Perdisci that Michael and I worked on was cancelled due to various issues. It seems that those issues have all been resolved on the current effort. Are these related? Michael, the process is identical to the last time when you and I worked together to get the sub award process going. You will need to submit a formal sub request that has a completed cost/price analysis and adequate selection memo along with the documents you have already provided. When you complete the submission, send me and email and I will grab it immediately. Looks like we are already working on the consent but we need the price/cost analysis among a few other certs to send over. Much of this will be provided once you submit a request in CIS. Thanks. Respectfully, Timothy Jackson|Contracting Officer-Subcontracts

Office of Sponsored Programs GeorgiaInstituteofTech nology -GTRI

926 Dalney Street, NW Atlanta, GA Office: 404.894.6954 or Cell: 404.710.0483|Fax: 404.385.0864| <image001.jpg>

From:Mitchell, Michael F Sent:Monday, August 17, 2020 3:50 PM To:Pilcher, Steve; Sibble, Dan Cc:Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Butler, Angel; Custodio, Victoria Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hey Steve & Dan, Attached are the budget justification, Budget, and SOW. What else do we need? M

From:Pilcher, Steve <<u>Steve.Pilcher@osp.gatech.edu</u>> Sent:Monday, August 17, 2020 3:47 PM To:Sibble, Dan J <Dan.Sibble@osp.gatech.edu>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu> Cc:Jackson, Timothy S < timothy.jackson@osp.gatech.edu>; Antonakakis, Manos <manos@gatech.edu>; Egerstedt, Magnus < magnus.egerstedt@ece.gatech.edu>; Melkote, Siri G < siri.melkote@ece.gatech.edu>; Butler, Angel D <</p> angel.butler@osp.gatech.edu>; Custodio, Victoria N < victoria.custodio@osp.gatech.edu> Subject: RE: Subaward - GATech : DARPA : Behavioral **Engine for Detecting Network Abuse** Mike, do you have this info requested below? Thanks Steven Pilcher, RAII/Sub Awards Manager **Office of Sponsored Programs** Georgia Institute of Technology Office: (404) 894-6939 Cell: (470) 990-0320 FAX: (404) 385-0864

From:Sibble, Dan Sent:Monday, August 17, 2020 3:13 PM To:Pilcher, Steve; Simpson, Dana; Mitchell, Michael F Cc:Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Butler, Angel; Custodio, Victoria Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hi Steve, For the consent request please have your team provide me with the standard consent request information items that I'll need to provide the government with (i.e., SOW, Cost/Price Analysis, Cert). Thanks, Dan **Dan Sibble Contracting Officer** Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

From:Butler, Angel Sent:Monday, August 17, 2020 11:23 AM To:Pilcher, Steve <<u>Steve.Pilcher@osp.gatech.edu</u>>; Simpson, Dana <<u>Dana.Simpson@osp.gatech.edu</u>>; Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u> >; Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> Cc:Jackson, Timothy <<u>timothy.jackson@osp.gatech.edu</u> >; Antonakakis, Manos <<u>manos@gatech.edu</u>>; Egerstedt, Magnus <<u>magnus.egerstedt@ece.gatech.edu</u> >; Melkote, Siri G <<u>siri.melkote@ece.gatech.edu</u>>; Custodio, Victoria <<u>victoria.custodio@osp.gatech.edu</u>> Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Good Morning Steve, Dan Sibble is the assigned CO for this contract. I have included him in this email. //Break// Morning Dan, Can you assist the sub-awards team with obtaining consent to subcontract? Let me know if you need anything else. Thanks, Angel

From: Pilcher, Steve Sent:Monday, August 17, 2020 11:15 AM To:Simpson, Dana; Mitchell, Michael F Cc:Butler, Angel; Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Custodio, Victoria Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Good Morning, I have spoken with Mike and here is way forward with this. For the Subcontracts Group: Mike is going to reinput the request for a subcontract against D8553 into CIS. Tim/Victoria, please keep an eye out for that request. This is a hot item, in that the sponsor is getting frustrated with the lack of support from this UGA individual. For the Contract Group: Angel, please let us know if you are the correct CO for this award. If so, we are going to need a consent to subcontract from the sponsor before we can finalize the subagreement ASAP. Please let me know if you have any questions. Thanks Steven Pilcher, RAII/Sub Awards Manager **Office of Sponsored Programs**

Georgia Institute of Technology Office: (404) 894-6939 Cell: (470) 990-0320 FAX: (404) 385-0864

From:Simpson, Dana Sent:Monday, August 17, 2020 10:48 AM To:Mitchell, Michael F Cc:Butler, Angel; Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Pilcher, Steve Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse I have spoken with Steve Pilcher, Subaward Manager, about this. He will give you a call today. **Dana Simpson Director**, Operations **Office of Sponsored Programs** Georgia Institute of Technology Atlanta, Georgia 30332-0420 Phone: (404)894-6934 FAX: (404)385-0864

From:Mitchell, Michael F Sent:Monday, August 17, 2020 10:12 AM To:Simpson, Dana <<u>Dana.Simpson@osp.gatech.edu</u>> Cc:Butler, Angel <<u>angel.butler@osp.gatech.edu</u>>; Jackson, Timothy <<u>timothy.jackson@osp.gatech.edu</u>>; Antonakakis, Manos <<u>manos@gatech.edu</u>>; Egerstedt, Magnus <<u>magnus.egerstedt@ece.gatech.edu</u>>; Melkote, Siri G <<u>siri.melkote@ece.gatech.edu</u>>; Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hey Dana,

We are trying to create a subagreement with UGA for D8553/AWD-100051. Dr. Perdisci, who we borrowed for the past two years, has returned to UGA, but his work and expertise is still critical for this project to succeed. UGA has agreed to apply for a subagreement with this to allow this to happen and they have reached out to GT to get the process done.

So far they have not heard anything from GT. I reached out to Timothy several times to give him a heads up that this was coming and to try and figure out where things are currently in the process, but I have received no response.

Can you assist us in figuring out where and why this process is stuck, and how we can avoid this going forward?

Thanks!

Michael Mitchell

Research Operations Program Manager

GEORGIAInstitute ofTECHnology

School of Electrical and Computer Engineering 777 Atlantic Drive NW Atlanta, GA 30332-0765 Office: 404-385-8122 Mobile: 770-655-8039

From:Mitchell, Michael F Sent:Wednesday, August 12, 2020 10:57 AM To:Jackson, Timothy S < timothy.jackson@osp.gatech.edu> Cc:Butler, Angel D <angel.butler@osp.gatech.edu> Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hey Tim, Can I please have an update on this? It is essential that we get this set up so Dr. Perdisci can resume his work on this project. Thanks, Michael

From:Mitchell, Michael F
Sent:Monday, August 3, 2020 2:11 PM
To:Jackson, Timothy S <
timothy.jackson@osp.gatech.edu
Subject:FW: Subaward - GATech : DARPA : Behavioral</pre>

Engine for Detecting Network Abuse Hey Timothy, This is in response to our new request for a subagreement with UGA for D8553 (AWD-100051). I know that I reached out earlier regarding getting approval from the sponsor for this, has there been any progress on this? Thanks!

Michael Mitchell

From:Heather Lyn Uhlman <<u>hluhlman@uga.edu</u>> Sent:Friday, July 31, 2020 2:18 PM To:Mitchell, Michael F < <u>michael.mitchell@ece.gatech.edu</u>> Subject:Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hi Michael, Dr. Perdisci indicated that this project submission might be delayed. Can you confirm and let me know when GATech will be submitting? Our Sponsored Projects office is requesting

confirmation.

Thanks!

Heather Lyn Uhlman, M.Ed.

Grants Coordinator II

Department of Computer Science

418 Boyd Graduate Studies Research Center/University

of Georgial Athens, GA 30602

<image002.png>

From:Antonakakis, Manos<manos@gatech.edu>Sent on:Tuesday, August 10, 2021 1:47:22 PMTo:McLaughlin, Steven W<sm140@gatech.edu>Subject:Re:USCC/DoD and GT Research opportunity

Same here, Steve. 15.00 works great.

Provost and Executive Vice President for Academic Affairs Georgia Institute of Technology

From: "Antonakakis, Manos" <manos@gatech.edu> Date: Monday, August 9, 2021 at 10:00 PM

To: "Fuller, Christian" <christian.fuller@legal.gatech.edu>, "Jara, Ana" <AJara@lowenstein.com>, "Schamel, Mark" <MSchamel@lowenstein.com>

Cc: "Abdallah, Chaouki T" <ctabdallah@gatech.edu>, "McLaughlin, Steven W" <swm@gatech.edu>, "Nie, Ling-Ling" <linglingnie@gatech.edu>

Subject: Re: USCC/DoD and GT Research opportunity

Folks, DARPA has been buzzing my phone around this request for support. Just got offthe phone with the PM team they want me to support them as this is a major priority for DoD. The first VTC about this is tomorrow at 16.00.

Really sorry but I cannot say no to this anymore. If I say no, it will damage my career.

Thus, please excuse me if I cannot reply timely to new request from DoJ's investigators in the future. Hopefully it has been clear to everyone that I tried mybest to be helpful, protect GT and my DARPA projects. I just cannot ruin my relationship with DARPA and DoD, and risk damaging my research career over this DoJ investigation. I simply worked way to hard to be respected like that from DARPA and DoD — I must protect my reputation and research. Ana/Mark; I told DARPA that tomorrow between 10.30 and 15.30 I will not be available for anything due to the meeting you have set up with the DoJ. Since I told Ana I will be available, I didn't want to back down from that statement. Thanks, Manos

From: Antonakakis, Manos <manos@gatech.edu>
Sent: Thursday, August 5, 2021 3:44:23 PM
To: Fuller, Christian <christian.fuller@legal.gatech.edu>; Jara, Ana <AJara@lowenstein.com>; Schamel, Mark
<MSchamel@lowenstein.com>
Cc: Abdallah, Chaouki T <ctabdallah@gatech.edu>; McLaughlin, Steven W <swm@gatech.edu>; Nie, Ling-Ling
linglingnie@gatech.edu>
Subject: Re: USCC/DoD and GT Research opportunity
Many thanks, Christian.

From: Fuller, Christian <christian.fuller@legal.gatech.edu>
Date: Thursday, August 5, 2021 at 3:43 PM
To: Antonakakis, Manos <manos@gatech.edu>, Jara, Ana <AJara@lowenstein.com>, Schamel, Mark
<MSchamel@lowenstein.com>

Hey Chris and Allison,

If USCC is interested in adopting the Rhamnousia framework across DoD, that would be an amazingly big deal for my research, GT and potentially the entire IC. Let me talk to the lawyers and see if I can be left alone for two three weeks so I can prepare for such an important meeting with the USCC.

Sorry to say this but, these days the lawyers take priority over USCC, DARPA, my research and what is in the best interest of the national security.

Thanks,

Manos Antonakakis, Ph.D. | <u>manos@gatech.edu</u> College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Schneck, Christopher (contr-i2o) <<u>christopher.schneck.ctr@darpa.mil</u>>
Date: Thursday, August 5, 2021 at 8:35 AM
To: Antonakakis, Manos <<u>manos@gatech.edu</u>>, <u>angelos@voreas.io</u> <<u>angelos@voreas.io</u>>
Cc: Kline, Allison <<u>allison.kline@darpa.mil</u>>
Subject: FW: Draft Agenda JCWA Technical Offsite

Manos and Angelos,

There is a USCYBERCOM Technical Offsite coming up 24-26 August and I would like to request that GT and VLI support DARPA for portions of this event. For the 24th, I'd like Jeremy to demo Delphi, a full walk through of the Gamaredon battlespaces. It wont be the full 2 hrs but we will turn it over to him at some point.

Manos, they are also very interested in the Rhamnousia framework because part of this discussion is related to data fabrics and re-factoring the BDP. Currently, they have requested a presentation early next week to go over your work. Based off that discussion, they may invite you to talk at the Offsite as well.

All of this can be done over Zoom or Microsoft Teams. Please let me know if you can support. V/r,

Chris Schneck DARPA I2O SETA 571-218-4429 (office) 571-524-3821 (cell) 918-6691 (NSTS)

From: O'Connor, Maureen J. <<u>Maureen.OConnor@jhuapl.edu</u>>

Sent: Wednesday, August 4, 2021 7:52 PM

To: Romzek, Wallis G. <<u>Wallis.Romzek@jhuapl.edu</u>>; Roberts, Dan <<u>Dan.Roberts@jhuapl.edu</u>>; Heald, Rob < <u>Rob.Heald@jhuapl.edu</u>>; Bartko, Dennis <<u>Dennis.Bartko@jhuapl.edu</u>>; Bowen, Calvert L. (Triiip) <

<u>Calvert.Bowen@jhuapl.edu</u>>; Bernays, D. - 0557 - MITLL <<u>bernays@ll.mit.edu</u>>; Ben Price <<u>ben.price@ll.mit.edu</u>>; Rosamaria S Morales <<u>rmorales@mitre.org</u>>; Rigsbee, Sarah <<u>Sarah.Rigsbee@jhuapl.edu</u>>; Schneck, Christopher (contri2o) <<u>christopher.schneck.ctr@darpa.mil</u>>; Roberts, Jennifer <<u>Jennifer.Roberts@darpa.mil</u>>; Kramer, Michael < <u>Michael.Kramer@jhuapl.edu</u>>

Cc: Simkins, Mark B. <<u>Mark.Simkins@jhuapl.edu</u>>; Piorkowski, John A. <<u>John.Piorkowski@jhuapl.edu</u>>; Smith, Christopher M. (AOS) <<u>Christopher.Smith@jhuapl.edu</u>>; Bogner, Kathleen - 0551 - MITLL <<u>Kathleen.Bogner@ll.mit.edu</u>>; Warwick, David <<u>David.Warwick@noblis.com</u>>; Warwick, David M <<u>dmwarwi@nsa.gov</u>>; Bogner, Kathleen A < <u>kabogne@nsa.gov</u>>; Mauck, Cherie L. <<u>Cherie.Mauck@jhuapl.edu</u>>

Subject: Draft Agenda JCWA Technical Offsite

All,

Keeping the distro of this small as all very much DRAFT.

First, thank you all for your excellent contributions and discussions over the past few weeks and days. We have tried to summarize everything into this draft agenda. Much work is still needed to flesh out the details of what we talk through for each piece and how we effectively tease out desired outcomes. However, I want to get this as set in stone as possible as we work those details so we can get it out to the participants.

Can I ask of all of you to please give me a thumbs up that we can move forward or tell me what we need to fix? Specific asks:

Dr. Roberts/Chris – Can you confirm the time allotted for the S&T examples is enough and that you can still support?

From:Antonakakis, Manos<manos@gatech.edu>Sent on:Thursday, August 5, 2021 5:42:09 PMTo:Abdallah, Chaouki T<ctabdallah@gatech.edu>Subject:Re:USCC/DoD and GT Research opportunity

Thanks Chaouki.

HARASMENT. Clear and obvious, harassment at this point because we have given them in black and white all they wanted and there is nothing there.

Manos

From: Abdallah, Chaouki T <ctabdallah@gatech.edu>
Date: Thursday, August 5, 2021 at 12:40 PM
To: Antonakakis, Manos <manos@gatech.edu>
Subject: Re: USCC/DoD and GT Research opportunity

Will reach out to Angelos today...

Sent from Chaouki's iPhone

On Aug 5, 2021, at 12:31 PM, Antonakakis, Manos <manos@gatech.edu> wrote:

Ana, Mark, Christian and GT Leadership,

The United States Cyber Command (USCC) is interested in exploring the possibility of adapting across the entire DoD the analytical and machine learning framework (Rhamnousia) I built as part of the DARPA Enhanced Attribution project. They would like me to prepare a session about this topic at the end of August.

To the best of my knowledge, not even highly classified things developed at GTRI have such DoD-wide (potential) impact. As you can imagine (looking at you virtually GT Leadership) such a session could benefit GT immensely in the years to come --- if I can prepare this session in the way it needs to be prepared. Therefore, and before I accept this invitation, I would like to be certain that I could have peace and quiet for at least a few weeks running up to this meeting.

Given that the DoJ inquisition/harassment against me and my research is still in full throttle, what would be your (legal?) advice here? Should I say yes, and potentially become unavailable to any further clarification requests and meetings from DoJ or should I say no and keep assisting this legal process so we can get this behind us as soon as humanly possible?

PS. In other news, Angelos was also served a subpoena (by the same prosecutor) today, at his residence, **Sector** . It might not be a bad idea for someone from GT to reach out to him, even if it is just for emotional support. Thanks,

_

Manos Antonakakis, Ph.D. | manos@gatech.edu

College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos <manos@gatech.edu>

Date: Thursday, August 5, 2021 at 12:05 PM

To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>,

angelos@voreas.io <angelos@voreas.io>

Cc: Kline, Allison <allison.kline@darpa.mil>

Subject: Re: Draft Agenda JCWA Technical Offsite

Hey Chris and Allison,

If USCC is interested in adopting the Rhamnousia framework across DoD, that would be an amazingly big deal for my research, GT and potentially the entire IC. Let me talk to the lawyers and see if I can be left alone for two three weeks so I can prepare for such an important meeting with the USCC. Sorry to say this but, these days the lawyers take priority over USCC, DARPA, my research and what is in the best interest of the national security. Thanks,

_

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>
Date: Thursday, August 5, 2021 at 8:35 AM
To: Antonakakis, Manos <manos@gatech.edu>, angelos@voreas.io <angelos@voreas.io>
Cc: Kline, Allison <allison.kline@darpa.mil>

Subject: FW: Draft Agenda JCWA Technical Offsite

Manos and Angelos,

There is a USCYBERCOM Technical Offsite coming up 24-26 August and I would like to request that GT and VLI support DARPA for portions of this event. For the 24th, I'd like Jeremy to demo Delphi, a full walk through of the Gamaredon battlespaces. It wont be the full 2 hrs but we will turn it over to him at some point.

Manos, they are also very interested in the Rhamnousia framework because part of this discussion is related to data fabrics and re-factoring the BDP. Currently, they have requested a presentation early next week to go over your work. Based off that discussion, they may invite you to talk at the Offsite as well.

All of this can be done over Zoom or Microsoft Teams. Please let me know if you can support. V/r,

Chris Schneck DARPA I2O SETA 571-218-4429 (office) 571-524-3821 (cell) 918-6691 (NSTS)

From: O'Connor, Maureen J. <Maureen.OConnor@jhuapl.edu>

Sent: Wednesday, August 4, 2021 7:52 PM

To: Romzek, Wallis G. <Wallis.Romzek@jhuapl.edu>; Roberts, Dan <Dan.Roberts@jhuapl.edu>; Heald, Rob <Rob.Heald@jhuapl.edu>; Bartko, Dennis <Dennis.Bartko@jhuapl.edu>; Bowen, Calvert L. (Triiip) <Calvert.Bowen@jhuapl.edu>; Bernays, D. - 0557 - MITLL <bernays@ll.mit.edu>; Ben Price <ben.price@ll.mit.edu>; Rosamaria S Morales <rmorales@mitre.org>; Rigsbee, Sarah <Sarah.Rigsbee@jhuapl.edu>; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Roberts, Jennifer <Jennifer.Roberts@darpa.mil>; Kramer, Michael <Michael.Kramer@jhuapl.edu> Cc: Simkins, Mark B. <Mark.Simkins@jhuapl.edu>; Piorkowski, John A. <John.Piorkowski@jhuapl.edu>; Smith, Christopher M. (AOS) <Christopher.Smith@jhuapl.edu>; Bogner, Kathleen - 0551 - MITLL <Kathleen.Bogner@ll.mit.edu>; Warwick, David <David.Warwick@noblis.com>; Warwick, David M <dmwarwi@nsa.gov>; Bogner, Kathleen A <kabogne@nsa.gov>; Mauck, Cherie L. <<Cherie.Mauck@jhuapl.edu>

Subject: Draft Agenda JCWA Technical Offsite All,

Keeping the distro of this small as all very much DRAFT.

First, thank you all for your excellent contributions and discussions over the past few weeks and days. We have tried to summarize everything into this draft agenda. Much work is still needed to flesh out the details of what we talk through for each piece and how we effectively tease out desired outcomes. However, I want to get this as set in stone as possible as we work those details so we can get it out to Given that the DoJ inquisition/harassment against me and my research is still in full throttle, what would be your (legal?) advice here? Should I say yes, and potentially become unavailable to any further clarification requests and meetings from DoJ or should I say no and keep assisting this legal process so we can get this behind us as soon as humanly possible? PS. In other news, Angelos was also served a subpoena (by the same prosecutor) today, at his residence, **and the same process**. It might not be a bad idea for someone from GT to

reach out to him, even if it is just for emotional support. Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu

College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos <<u>manos@gatech.edu</u>>
Date: Thursday, August 5, 2021 at 12:05 PM
To: Schneck, Christopher (contr-i2o) <<u>christopher.schneck.ctr@darpa.mil</u>>,
angelos@voreas.io <angelos@voreas.io>
Cc: Kline, Allison <<u>allison.kline@darpa.mil</u>>
Subject: Re: Draft Agenda JCWA Technical Offsite

Hey Chris and Allison,

If USCC is interested in adopting the Rhamnousia framework across DoD, that would be an amazingly big deal for my research, GT and potentially the entire IC. Let me talk to the lawyers and see if I can be left alone for two three weeks so I can prepare for such an important meeting with the USCC. Sorry to say this but, these days the lawyers take priority over USCC, DARPA, my research and what is in the best interest of the national security.

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu

College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Schneck, Christopher (contr-i2o) <<u>christopher.schneck.ctr@darpa.mil</u>> Date: Thursday, August 5, 2021 at 8:35 AM To: Antonakakis, Manos <manos@gatech.edu>, angelos@voreas io <angelos@voreas

To: Antonakakis, Manos <<u>manos@gatech.edu</u>>, <u>angelos@voreas.io</u> <<u>angelos@voreas.io</u>> Cc: Kline, Allison <<u>allison.kline@darpa.mil</u>>

Subject: FW: Draft Agenda JCWA Technical Offsite

Manos and Angelos,

There is a USCYBERCOM Technical Offsite coming up 24-26 August and I would like to request that GT and VLI support DARPA for portions of this event. For the 24th, I'd like Jeremy to demo Delphi, a full walk through of the Gamaredon battlespaces. It wont be the full 2 hrs but we will turn it over to him at some point.

Manos, they are also very interested in the Rhamnousia framework because part of this discussion is related to data fabrics and re-factoring the BDP. Currently, they have requested a presentation early next week to go over your work. Based off that discussion, they may invite you to talk at the Offsite as well.

All of this can be done over Zoom or Microsoft Teams. Please let me know if you can support. V/r,

Chris Schneck DARPA I2O SETA 571-218-4429 (office) 571-524-3821 (cell) From: O'Connor, Maureen J. <<u>Maureen.OConnor@jhuapl.edu</u>>

Sent: Wednesday, August 4, 2021 7:52 PM

To: Romzek, Wallis G. <<u>Wallis.Romzek@jhuapl.edu</u>>; Roberts, Dan <<u>Dan.Roberts@jhuapl.edu</u>>; Heald, Rob <<u>Rob.Heald@jhuapl.edu</u>>; Bartko, Dennis <<u>Dennis.Bartko@jhuapl.edu</u>>; Bowen, Calvert L. (Triiip) <<u>Calvert.Bowen@jhuapl.edu</u>>; Bernays, D. - 0557 - MITLL <<u>bernays@ll.mit.edu</u>>; Ben Price < <u>ben.price@ll.mit.edu</u>>; Rosamaria S Morales <<u>rmorales@mitre.org</u>>; Rigsbee, Sarah < <u>Sarah.Rigsbee@jhuapl.edu</u>>; Schneck, Christopher (contr-i2o) <<u>christopher.schneck.ctr@darpa.mil</u>>; Roberts, Jennifer <<u>Jennifer.Roberts@darpa.mil</u>>; Kramer, Michael <<u>Michael.Kramer@jhuapl.edu</u>> **Cc:** Simkins, Mark B. <<u>Mark.Simkins@jhuapl.edu</u>>; Piorkowski, John A. <<u>John.Piorkowski@jhuapl.edu</u>>; Smith, Christopher M. (AOS) <<u>Christopher.Smith@jhuapl.edu</u>>; Bogner, Kathleen - 0551 - MITLL < <u>Kathleen.Bogner@ll.mit.edu</u>>; Warwick, David <<u>David.Warwick@noblis.com</u>>; Warwick, David M < <u>dmwarwi@nsa.gov</u>>; Bogner, Kathleen A <<u>kabogne@nsa.gov</u>>; Mauck, Cherie L. < <u>Cherie.Mauck@jhuapl.edu></u>

Subject: Draft Agenda JCWA Technical Offsite

All,

Keeping the distro of this small as all very much DRAFT.

First, thank you all for your excellent contributions and discussions over the past few weeks and days. We have tried to summarize everything into this draft agenda. Much work is still needed to flesh out the details of what we talk through for each piece and how we effectively tease out desired outcomes. However, I want to get this as set in stone as possible as we work those details so we can get it out to the participants.

Can I ask of all of you to please give me a thumbs up that we can move forward or tell me what we need to fix?

Specific asks:

Dr. Roberts/Chris – Can you confirm the time allotted for the S&T examples is enough and that you can still support? Happy to neck down or change as needed.

Chris – we discussed using the EA use case as our training aid to tease out much of what we need to define for the integration environment, the data curator etc. Can we schedule some time to work through that with you Friday or early next week?

All – Prep for Data Fabric Discussion (Day 1) early next week we want to host (virtually) a small data fabric sharing forum (this may be the first of a few as needed) to discuss a few examples:

1. Chris Schneck – the EA Backend

2. APL - Data Fabric Best Practices

3. Ben Price – JAIC Integration Environment

Invite to be sent out and the intent is not only to share but potentially work to identify a way ahead that we could present to the audience at the Technical Offsite.

Rosie – Can you provide a list of names of the BDP instance engineers/owners? Also, any Navy personnel you think would be good to invite or a POC I could reach out to who may help me find a Navy SME?

---break----

Wallis and I will provide COL Carr and IPR on this agenda tomorrow afternoon so would appreciate your feedback on that as first priority and then more insight to the other as soon as possible.

Thank you all again for making this possible. I think this will be the first of many successful events to speed up effectiveness of JCWA for the operational forces!!

Regards, mo'c

Maureen O'Connor The Johns Hopkins University Applied Physics Laboratory (240) 917-5762 From: "Antonakakis, Manos" </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7e6b0afc581e477db35a37c3a3a79aeb-Antonakakis> Sent on: Tuesday, December 7, 2021 6:12:01 PM To: Sibble, Dan <Dan.Sibble@osp.gatech.edu> CC: Mitchell, Michael F <michael.mitchell@ece.gatech.edu>; Keromytis, Angelos D <angelos@gatech.edu>; Lever, Charles C <chazlever@gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu>; McLaughlin, Steven W <swm@gatech.edu>

Hey Dan, hope you are doing great.

Subject: SMOKE DARPA proposal

This is a heads up that the COEUS center will be submitting a proposal for at least TA2 (and maybe TA1) of the DARPA SMOKE program, and I will be the PI.

https://sam.gov/opp/8832e2b8d9864169a234834eea89e5f1/view

We are currently working to finalize the list of subcontractors we will have in our team. You will know when we finalized this list.

The upper management of the Institute is aware of our intention to submit this proposal. Because we envision the budget of this program to be kind of big (~\$25M for 3.5 years), I would appreciate your close collaboration with Michael to make sure that the Volume 2 of is rock solid.

Proposals are due end of January.

Thanks, Manos

From: "Antonakakis, Manos" </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7e6b0afc581e477db35a37c3a3a79aeb-Antonakakis>

Sent on: Thursday, August 5, 2021 5:31:05 PM

- To: Jara, Ana<AJara@lowenstein.com>; Schamel, Mark<MSchamel@lowenstein.com>; Fuller, Christian<christian.fuller@legal.gatech.edu>
- CC: Abdallah, Chaouki T<ctabdallah@gatech.edu>; McLaughlin, Steven W<swm@gatech.edu>; Nie, Ling-Ling<linglingnie@gatech.edu>

Subject: USCC/DoD and GT Research opportunity

Ana, Mark, Christian and GT Leadership,

The United States Cyber Command (USCC) is interested in exploring the possibility of adapting across the entire DoD the analytical and machine learning framework (Rhamnousia) I built as part of the DARPA Enhanced Attribution project. They would like me to prepare a session about this topic at the end of August.

To the best of my knowledge, not even highly classified things developed at GTRI have such DoD-wide (potential) impact. As you can imagine (looking at you virtually GT Leadership) such a session could benefit GT immensely in the years to come --- if I can prepare this session in the way it needs to be prepared. Therefore, and before I accept this invitation, I would like to be certain that I could have peace and quiet for at least a few weeks running up to this meeting.

Given that the DoJ inquisition/harassment against me and my research is still in full throttle, what would be your (legal?) advice here? Should I say yes, and potentially become unavailable to any further clarification requests and meetings from DoJ or should I say no and keep assisting this legal process so we can get this behind us as soon as humanly possible?

PS. In other news, Angelos was also served a subpoena (by the same prosecutor) today, at his residence,

. It might not be a bad idea for someone from GT to reach out to him, even if it is just for

emotional support.

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos <manos@gatech.edu>
Date: Thursday, August 5, 2021 at 12:05 PM
To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>, angelos@voreas.io
<angelos@voreas.io>
Cc: Kline, Allison <allison.kline@darpa.mil>
Subject: Re: Draft Agenda JCWA Technical Offsite

Hey Chris and Allison,

If USCC is interested in adopting the Rhamnousia framework across DoD, that would be an amazingly big deal for my research, GT and potentially the entire IC. Let me talk to the lawyers and see if I can be left alone for two three weeks so I can prepare for such an important meeting with the USCC.

Sorry to say this but, these days the lawyers take priority over USCC, DARPA, my research and what is in the best interest of the national security.

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 To: Antonakakis, Manos <manos@gatech.edu>, angelos@voreas.io <angelos@voreas.io> Cc: Kline, Allison <allison.kline@darpa.mil> Subject: FW: Draft Agenda JCWA Technical Offsite

Manos and Angelos,

There is a USCYBERCOM Technical Offsite coming up 24-26 August and I would like to request that GT and VLI support DARPA for portions of this event. For the 24th, I'd like Jeremy to demo Delphi, a full walk through of the Gamaredon battlespaces. It wont be the full 2 hrs but we will turn it over to him at some point.

Manos, they are also very interested in the Rhamnousia framework because part of this discussion is related to data fabrics and re-factoring the BDP. Currently, they have requested a presentation early next week to go over your work. Based off that discussion, they may invite you to talk at the Offsite as well.

All of this can be done over Zoom or Microsoft Teams. Please let me know if you can support. V/r,

Chris Schneck DARPA I2O SETA 571-218-4429 (office) 571-524-3821 (cell) 918-6691 (NSTS)

From: O'Connor, Maureen J. <Maureen.OConnor@jhuapl.edu>

Sent: Wednesday, August 4, 2021 7:52 PM

To: Romzek, Wallis G. <Wallis.Romzek@jhuapl.edu>; Roberts, Dan <Dan.Roberts@jhuapl.edu>; Heald, Rob <Rob.Heald@jhuapl.edu>; Bartko, Dennis <Dennis.Bartko@jhuapl.edu>; Bowen, Calvert L. (Triiip)

<Calvert.Bowen@jhuapl.edu>; Bernays, D. - 0557 - MITLL <bernays@ll.mit.edu>; Ben Price <ben.price@ll.mit.edu>; Rosamaria S Morales <rmorales@mitre.org>; Rigsbee, Sarah <Sarah.Rigsbee@jhuapl.edu>; Schneck, Christopher (contri2o) <christopher.schneck.ctr@darpa.mil>; Roberts, Jennifer <Jennifer.Roberts@darpa.mil>; Kramer, Michael <Michael.Kramer@jhuapl.edu>

Cc: Simkins, Mark B. <Mark.Simkins@jhuapl.edu>; Piorkowski, John A. <John.Piorkowski@jhuapl.edu>; Smith, Christopher M. (AOS) <Christopher.Smith@jhuapl.edu>; Bogner, Kathleen - 0551 - MITLL <Kathleen.Bogner@ll.mit.edu>; Warwick, David <David.Warwick@noblis.com>; Warwick, David M <dmwarwi@nsa.gov>; Bogner, Kathleen A <kabogne@nsa.gov>; Mauck, Cherie L. <Cherie.Mauck@jhuapl.edu>

Subject: Draft Agenda JCWA Technical Offsite

All,

Keeping the distro of this small as all very much DRAFT.

First, thank you all for your excellent contributions and discussions over the past few weeks and days. We have tried to summarize everything into this draft agenda. Much work is still needed to flesh out the details of what we talk through for each piece and how we effectively tease out desired outcomes. However, I want to get this as set in stone as possible as we work those details so we can get it out to the participants.

Can I ask of all of you to please give me a thumbs up that we can move forward or tell me what we need to fix? Specific asks:

Dr. Roberts/Chris – Can you confirm the time allotted for the S&T examples is enough and that you can still support? Happy to neck down or change as needed.

Chris – we discussed using the EA use case as our training aid to tease out much of what we need to define for the integration environment, the data curator etc. Can we schedule some time to work through that with you Friday or early next week?

All – Prep for Data Fabric Discussion (Day 1) early next week we want to host (virtually) a small data fabric sharing forum (this may be the first of a few as needed) to discuss a few examples:

- 1. Chris Schneck the EA Backend
- 2. APL Data Fabric Best Practices
- 3. Ben Price JAIC Integration Environment

Invite to be sent out and the intent is not only to share but potentially work to identify a way ahead that we could present to the audience at the Technical Offsite.

Rosie – Can you provide a list of names of the BDP instance engineers/owners? Also, any Navy personnel you think would be good to invite or a POC I could reach out to who may help me find a Navy SME?

---break----

Wallis and I will provide COL Carr and IPR on this agenda tomorrow afternoon so would appreciate your feedback on that as first priority and then more insight to the other as soon as possible.

From:	Antonakakis, Manos <manos@gatech.edu></manos@gatech.edu>	
Sent on:	Thursday, September 30, 2021 3:16:08 PM	
To:	Abdallah, Chaouki T <ctabdallah@gatech.edu>; McLaughlin, Steven W<swm@gatech.edu></swm@gatech.edu></ctabdallah@gatech.edu>	
CC:	Fuller, Christian <christian.fuller@legal.gatech.edu>; Nie, Ling-Ling<linglingnie@gatech.edu></linglingnie@gatech.edu></christian.fuller@legal.gatech.edu>	
Subject:	We are done with EA	
Attachments: FinalTechnicalReportEA-Antonakakis-Rhamnousia-v3-09202021.pdf (4.07 MB)		

CLASSIFICATION: UNCLASSIFIED//FOUO - DISTRIBUTION F

Hey Chaouki and Steve,

You asked me to give you a heads up when EA has been finally delivered and also share with you the final technical report. I am very pleased to report that GT has successfully delivered all technical requirements for EA. Few minor DoD forms are missing, but my team is working on that as we speak. Attached please find the final technical report. I also have written confirmation that DARPA and AFRL are extremely pleased from the work we did in this project. Two things you need to pay attention to from this point on. First, the final report has been clearly marked as DISTRIBUTION F. This means that DARPA or the office of the secretary of defense (OSD) are the only legal DoD authorities that can share this report with others. Second, several of the analyses (if not all) in EA is CUI. My last understanding of the EA contract has been that we will have to delete these CUI data after we deliver it to DARPA. We delivered the analytical results, code base, and presentations/reports to DARPA.

At this point, sadly, I am not sure what we need to delete and when because of the SC shenanigans. Regardless of what GT wants to do here, one thing is certain: I would like to not be responsible if a future compromise of one of my servers causes all this data to be leaked. The risk is simply huge with me and my research all over the conspiracy theories right now. My unsolicited advice would be to look into this issue and determine what needs to be preserved and how. Whatever you decide, I would really appreciate it if I am not on the hook for any of this CUI data that I should be deleting right now in my role as the GT PI of EA.

Ling-Ling/Christian, you are CCed because I suspect Steve and Chaouki will have to talk to you about this and yet again come up with a game plan for this. If you need technical advice, you know how to reach me. Thanks,

_

Manos Antonakakis, Ph.D. |manos@gatech.edu

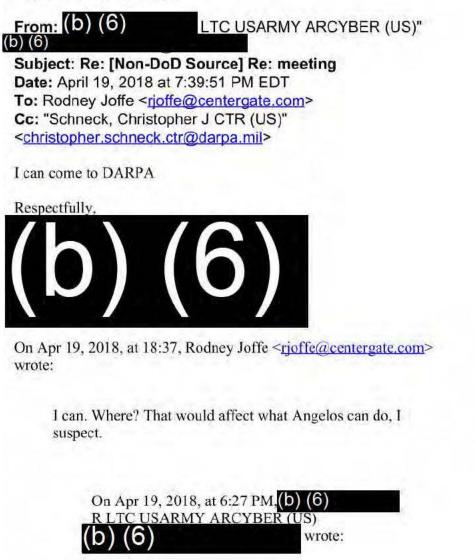
College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology You and Link.

On Apr 19, 2018, at 20:23, Rodney Joffe <rioffe@centergate.com> wrote:

I happen to have my chief technical guy for cleared stuff (Link King) here (he's based on the West Coast) through 1300 tomorrow. And John got back from RSA this afternoon.

Would it be useful for Link and/or John to join the meeting?

Begin forwarded message:



Thu 4/19/2018 8:24 PM

Rodney Joffe <rjoffe@centergate.com>

Fwd: [Non-DoD Source] Re: meeting

To 🔅 Keromytis, Angelos

I happen to have my chief technical guy for cleared stuff (Link King) here (he's based on the West Coast) through 1300 tomorrow. And John got back from RSA this afternoon.

Would it be useful for Link and/or John to join the meeting?

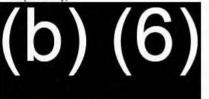
Begin forwarded message:

From: (b) (6) LTC USARMY ARCYBER (US)" (b) (6) Subject: Re: [Non-DoD Source] Re: meeting Date: April 19, 2018 at 7:39:51 PM EDT To: Rodney Joffe <rioffe@centergate.com>

Cc: "Schneck, Christopher J CTR (US)" <christopher.schneck.ctr@darpa.mil>

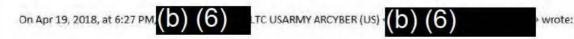
I can come to DARPA

Respectfully,



On Apr 19, 2018, at 18:37, Rodney Joffe <rioffe@centergate.com> wrote:

I can. Where? That would affect what Angelos can do, I suspect.



Can we do 1200???

Respectfully,







On Apr 19, 2018, at 18:37, Rodney Joffe <rioffe@centergate.com> wrote:

I can. Where? That would affect what Angelos can do, I suspect.

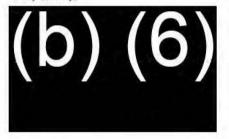
On Apr 19, 2018, at 6:27 PM, (b) (6)

LTC USARMY ARCYBER (US) (b) (6)

wrote:

Can we do 1200???

Respectfully,



On Apr 19, 2018, at 16:49, Schneck, Christopher (contr-i2o) < christopher.schneck.ctr@darpa.mil> wrote;

Yes, that's what I meant. Waiting to hear back from LTC (b) (6) If it's a go, I'll ask Angelos about attendees.

On Apr 19, 2018, at 4:36 PM, Rodney Joffe <rioffe@centergate.com> wrote:

I think you meant 1100 at LTC (b) (6) site.

As far as clearances, mine (SCI) are held by the NSA so that should not require passing (I am in JPAS and Scattered Castles).

We could also hold it at my site in Sterling (I can go to TS at that site, not SCI).

Chris, could you please check if Angelos would be OK with John Hall and Link King, our Classified Tech Lead also joining, or if he thinks it should just be me?

Thanks

On Apr 19, 2018, at 12:45 PM, Schneck, Christopher (contr-i2o) <<u>christopher.schneck.ctr@darpa.mil</u>> wrote:

That could work, Angelos just has to be back by 1300.



Are you available tomorrow at 1300? It might be too late for clearances for Rodney at your site but we could all meet out at Rodney's location.

Thanks,

Chris Schneck

DARPA 120 SETA



-----Original Message-----

From: Rodney Joffe <rioffe@centergate.com>

Sent: Thursday, April 19, 2018 12:42 PM

To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>



LTC USARMY ARCYBER (US) (b) (c)

Subject: Re: meeting

If we could do 11 tomorrow it would be the grand prize for me. I have an 8am in Chantilly.

On Apr 19, 2018, at 12:25 PM, Schneck, Christopher (contr-i2o) <<u>christopher.schneck.ctr@darpa.mil</u>> wrote:

We could do it tomorrow morning 10ish if (D) (6) was available then.

Chris Schneck

DARPA 120 SETA



-----Original Message-----

From: Rodney Joffe <rioffe@centergate.com>

Sent: Thursday, April 19, 2018 12:08 PM

To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>

cc:(b) (6)

LTC USARMY ARCYBER (US) (b) (6)

Subject: Re: meeting

I am available tomorrow or most of next week. However I am likely OCONUS the week after.

On Apr 19, 2018, at 11:41 AM, Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> wrote:



I talked with Angelos and I think we should have the meeting to make sure everyone is on the same page. Let me know when everyone is available? Angelos won't be available until May 3-4. Let me know if one of those days would work.

Thanks,

Chris Schneck



-----Original Message-----

From: Rodney Joffe <rioffe@centergate.com>

Sent: Thursday, April 19, 2018 9:34 AM

To:(b) (6)

LTC USARMY ARCYBER (US)

(6)

Cc: Schneck, Christopher (contr-i2o) < christopher.schneck.ctr@darpa.mil>

Subject: Re: meeting



Apologies for the delay. I am available whenever you are. What options do you have for time and place? I am located in Tysons Corner when I am in the office, but can meet anywhere, including up your way.

Regards

Rodney

Rodney Joffe

SVP, Senior Technologist, and Fellow

National Security Executive

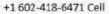
Neustar, Inc.

1861 International Drive, 6th Floor

McLean VA 22102

USA

+1 202-533-2900 Direct



rodney.joffe@team.neustar

On Apr 19, 2018, at 9:22 AM (b) (6)

LTC USARMY ARCYBER (US

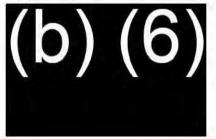
vrote:

Team,

I would like to get my money guys in touch with whomever is running the contract we are going to jump on. We are trying to get all of our contract lined up.

(6)

Respectfully,



From: Schneck, Christopher (contr-i2o) [christopher.schneck.ctr@darpa.mil]

Sent: Wednesday, April 18, 2018 7:56 AM

To:(b)(6)

LTC USARMY ARCYBER (US)

Cc: rjoffe@centergate.com

Subject: meeting



First, Rodney we didn't get the chance to meet but I am Angelos' new technical SETA. Nice to meet you, Im sure we will run into each other soon.

LTC (b) (6) I wanted to connect you and Rodney (Neustar) together because I think Rodney can provide you with some valuable opportunities and I know you weren't

From: Schneck, Christopher (contr-i2o) [christopher.schneck.ctr@darpa.mil]

Sent: Wednesday, April 18, 2018 7:56 AM



LTC USARMY ARCYBER (US)

Cc: rjoffe@centergate.com

Subject: meeting



First, Rodney we didn't get the chance to meet but I am Angelos' new technical SETA. Nice to meet you, Im sure we will run into each other soon.

LTC(b) (6) I wanted to connect you and Rodney (Neustar) together because I think Rodney can provide you with some valuable opportunities and I know you weren't able to make it the last time Rodney was at DARPA. If you want, we can arrange another meeting at DARPA or maybe back out at your facility. Either way, I didn't want the ball to drop, let me know if you need anything from me.

V/R,

Chris Schneck

DARPA 120 SETA





From:	Keromytis, Angelos
To:	dagon@sudo.sh; Michael Farrell
Cc:	manos@gatech.edu
Subject:	Fwd: PDF IOC extraction
Date:	Friday, April 14, 2017 9:47:29 PM

Fingers faster than brain.

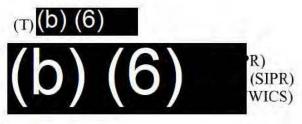
Begin forwarded message:

From: "Keromytis, Angelos" (b) (6) Subject: PDF IOC extraction Date: April 14, 2017 at 9:46:59 PM EDT To: Mike Frantzen <<u>mikef@kududyn.com</u>> Cc: manos@gatech.edu, (b) (6)

Mike,

can you share the IOC extraction tool with Manos? Or, if you've already used it on all the APT reports, can you send him the extracted indicators? Thanks,

Dr Angelos D. Keromytis Program Manager, Information Innovation Office (I2O) DARPA 675 N. Randolph Street Arlington, VA 22203



- 1.1	
Subject: Location:	Neustar-ARCYBER DARPA HQ- 09-106
Start:	Fri 4/20/2018 12:00 PM
End:	Fri 4/20/2018 1:00 PM
Show Time As:	Tentative
Recurrence:	(none)
Meeting Status:	Not yet responded
Organizer:	Keromytis, Angelos

 From:
 Schneck, Christopher (contr-i2o)

 To:
 Rodney Joffe

 Cc:
 Keromytis, Angelos

 Subject:
 RE: [Non-DoD Source] Re: meeting

 Date:
 Friday, April 20, 2018 9:02:50 AM

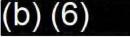
Rodney,

Link is good to go.

Angelos,

Do I need to book a conference room for a TS level discussion or can we do it in your office?

Chris Schneck DARPA I2O SETA



-----Original Message-----From: Schneck, Christopher (contr-i2o) Sent: Friday, April 20, 2018 7:18 AM To: 'Rodney Joffe' <rjoffe@centergate.com> Subject: RE: [Non-DoD Source] Re: meeting

I won't know the status until 8am. That's when they get in apparently. Did you send it through JPASS or fax?

Chris Schneck

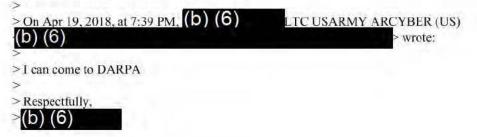


----Original Message-----From: Rodney Joffe <rjoffe@centergate.com> Sent: Friday, April 20, 2018 7:03 AM To: Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> Cc:(b) (6) Subject: Re: [Non-DoD Source] Re: meeting

Ack. I talked with Angelos. He asked me to bring Link King with. We passed clearances to your SMO last night. Could you please confirm?

> On Apr 20, 2018, at 5:19 AM, Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil> wrote; >

> That all will work for us. 1200 at DARPA





> On Apr 19, 2018, at 18:37, Rodney Joffe <rjoffe@centergate.com<mailto:rjoffe@centergate.com>> wrote:

> I can. Where? That would affect what Angelos can do, I suspect.

> > On Apr 19, 2018, at 6:27 PM, (b) (6) LT<u>C USARMY ARCYBER (US)</u> (b) (6) wrote: > Can we do 1200??? > > Respectfully, > On Apr 19, 2018, at 16:49, Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>> wrote: > > Yes, that's what I meant. Waiting to hear back from LTC (b) (6) If it's a go, I'll ask Angelos about attendees. > > On Apr 19, 2018, at 4:36 PM, Rodney Joffe <rioffe@centergate.com<mailto:rioffe@centergate.com>> wrote: 2 > I think you meant 1100 at LTC(b) (6)site. > > As far as clearances, mine (SCI) are held by the NSA so that should not require passing (I am in JPAS and Scattered Castles). > > We could also hold it at my site in Sterling (I can go to TS at that site, not SCI). > > Chris, could you please check if Angelos would be OK with John Hall and Link King, our Classified Tech Lead also joining, or if he thinks it should just be me? > > Thanks > >

> On Apr 19, 2018, at 12:45 PM, Schneck, Christopher (contr-i2o)

<christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darpa.mil>> wrote:

>

>

2

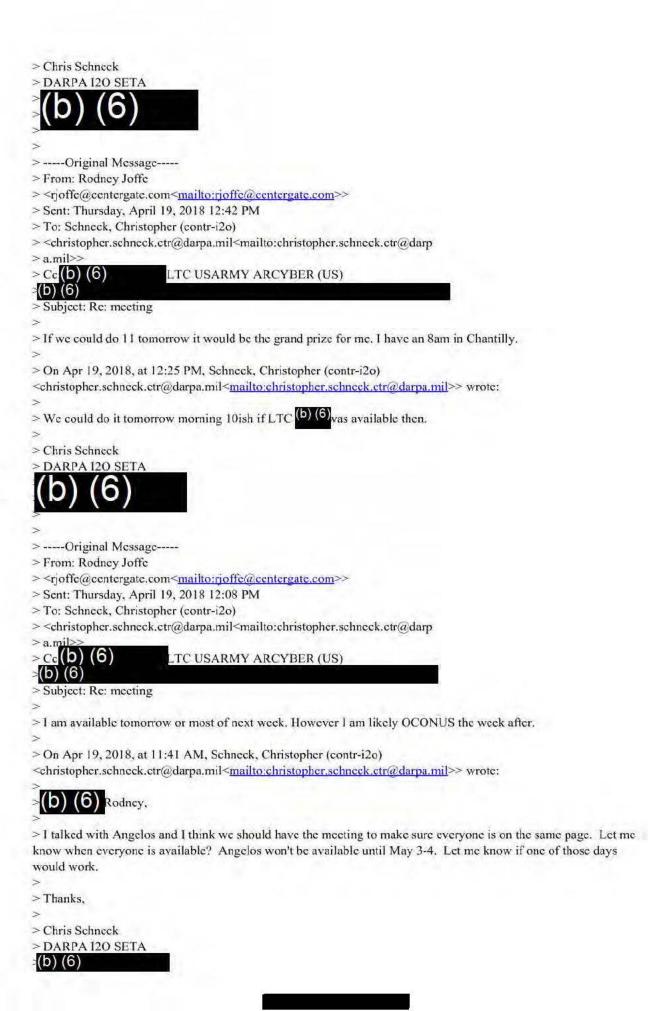
> That could work, Angelos just has to be back by 1300.

> > LTC > b) (6)

> Are you available tomorrow at 1300? It might be too late for clearances for Rodney at your site but we could all meet out at Rodney's location.

>

- > Thanks,
- >





- > ----- Original Message-----
- > From: Rodney Joffe
- > <rjoffe@centergate.com<mailto:rjoffe@centergate.com>>>
- > Sent: Thursday, April 19, 2018 9:34 AM
- $> T_0:(b)(6)$ LTC USARMY ARCYBER (US)
- >(b) (6)
- > Cc: Schneck, Christopher (contr-i2o)
- > <christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darp
- > a.mil>>
- > Subject: Re: meeting
- > > Hello LTC (b) (6)

> > Apologies for the delay. I am available whenever you are. What options do you have for time and place? I am located in Tysons Corner when I am in the office, but can meet anywhere, including up your way.

- >
- > Regards
- > Rodney
- >
- > Rodney Joffe
- > SVP, Senior Technologist, and Fellow
- > National Security Executive
- > Neustar, Inc.
- >1861 International Drive, 6th Floor
- > McLean VA 22102
- >USA
- >+1 202-533-2900 Direct
- >+1 602-418-6471 Cell
- > rodncy.joffc@team.neustar<mailto:rodncy.joffc@team.neustar>

(b

```
> On Apr 19, 2018, at 9:22 AM, (b) (6)
       6
```



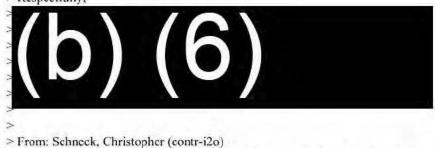
> Tcam.

>

> I would like to get my money guys in touch with whomever is running the contract we are going to jump on. We are trying to get all of our contract lined up.

> >

> Respectfully,



- > [christopher.schneck.ctr@darpa.mil<mailto:christopher.schneck.ctr@darp
- > a.mil>]
- > Sent: Wednesday, April 18, 2018 7:56 AM
- > To(0)(6)LTC USARMY ARCYBER (US)
- > Cc: rjoffe@centergate.com<mailto:rjoffe@centergate.com>

> Subject: meeting

> LTC (b) (6) and Rodney,

>

>

>

>

> First, Rodney we didn't get the chance to meet but I am Angelos' new technical SETA. Nice to meet you, Im sure we will run into each other soon.

> LTC (b) (6) (6) I wanted to connect you and Rodney (Neustar) together because I think Rodney can provide you with some valuable opportunities and I know ycu weren't able to make it the last time Rodney was at DARPA. If you want, we can arrange another meeting at DARPA or maybe back out at your facility. Either way, I didn't want the ball to drop, let me know if you need anything from me.

Keromytis, Angelos
dagon
Ann.Cox@HQ.DHS.GOV; Manos Antonakakis
Re: attribution note
Friday, November 18, 2016 12:09:16 PM

Thanks David.

Ann, let me know if/when you want to talk. -Angelos

> On Nov 18, 2016, at 8:49 AM, dagon <dagon@sudo.sh> wrote:

>

>Hi Ann,

>

> It was good to see you at the DINR DNS conference. As I mentioned,

> we're working on an Enhanced Attribution project under DARPA. Angelos

> Keromytis, copied above, is our PM.

>

> Angelos, Ann was our PM under a previous BAA, which created

> essential tools and data insights, many now being used in our EA

> effort. Ann is also looking at the attribution area, and even has an

> older, broader whitepaper Manos and I wrote (pre-EA) outlining major

> research problems in ths space. Ann is also interested in any of our

> early EA insights. So I suggested I would connect you both.

>

> While it's hard to predict future policy directions, one path seems

> to hold an increased interest in cyber protections. So, you both

> might want to compare notes about attribution, and consider what open

> problems remain.

- >
- > Best,
- >

>---

> David Dagon

> dagon@sudo.sh

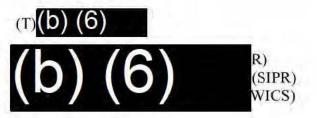
> D970 6D9E E500 E877 B1E3 D3F8 5937 48DC 0FDC E717

From:	Keromytis, Angelos
To:	Rodney Joffe
Subject:	Re: Confirming address and time for tomorrow
Date:	Wednesday, March 1, 2017 10:49:38 PM

Excellent. We're all arriving separately, but you have the names of everyone who's coming in.

Looking forward to it :)

Dr Angelos D. Keromytis Program Manager, Information Innovation Office (I2O) DARPA 675 N. Randolph Street Arlington, VA 22203



On Mar 1, 2017, at 10:25 PM, Rodney Joffe <rioffe@centergate.com> wrote:

We're expecting your gang at 1pm at

46000 Center Oak Plaza Sterling VA 20166

We've got a lot to cover and not much time. Our agenda takes us to 4:15 or so on the unclass side alone.

We have a LOT of stuff Lisa is authorizing :-)

dagon
Keromytis, Angelos
Antonakakis, Manos; (b) (6) (contr-i2o)
Re: DARPA domains
Monday, August 28, 2017 3:18:38 PM

On Mon, Aug 28, 2017 at 02:35:01PM +0000, Keromytis, Angelos wrote: > Nice :)

There's a "TODO" item, to find some missing timestamps, needed for accurate traffic analysis. I should have those soon, and will send an update. However, there's enough in the report to get started. We think we've identified an actor (or the last hop in a compromised account), as well as a likely victim.

David Dagon dagon@sudo.sh D970 6D9E E500 E877 B1E3 D3F8 5937 48DC 0FDC E717

-

:)

1pm on Thursday it is. See you then. -Angelos

On Apr 24, 2016, at 10:45 PM, Rodney Joffe <rjoffe@centergate.com> wrote:

>

>> On Apr 24, 2016, at 8:54 PM, Keromytis, Angelos (b) (6)

wrote:

>> Rodney, thanks for the meeting the other day. I definitely want to talk about the details. This week, Thursday and Friday are good. After that, next open day for me is May 9. What works for you? I think meeting at DARPA would make sense? We're at 675 N Randolph Street, in Arlington (2 blocks for the Ballston metro station, Orange line).

> Until 6 months ago I lived (b) (6)

(b) (6)

> That works well. Thursday 1pm or so would be easiest for my partner to come up from Virginia Beach - as I said he is the brains of the company. But whatever works for you....

> >>

>> I've known Steve for over 15 years, and we've been colleagues at Columbia for ~10. Steve's great. (I also know Randy, albeit not as well.)

>

> Well, you've met me now. You know the other two. So you can see why all 3 of us fit the curmudgeon bill in looks as well as network interests :-). Randy and Steve are obviously more focused on security protocols like you - there I am an idiot. But dns and networks - thats where my interest lie.

>

>Regards

>Rodney

>

>> Cheers,

>> -Angelos

>>

>> On Apr 24, 2016, at 6:50 PM, Rodney Joffe <r joffe@centergate.com>

>> wrote:

>>

>>> Hi Angelos,

>>>

>>> First, thanks for meeting up with me on Friday. I appreciate you coming out west. As you said, maybe we could have met in Chantilly earlier :-)

>>>

>>> Second, I only just realized that you've done a lot os stuff with Steve Bellovin...

>>>

>>> I've known Steve for decades :-). He and I are two of a group of three that are referred to as curmudgeons in the network world (the other is Randy Bush). Steve is a good guy...

>>>

>>> Finally, let me know when you want to talk about the details around our general discussion. Should be much more interesting on the other side of the line...

>>>	
>>>	Regards
>>>	Rodney
>>>	
>>>	
>>>: >>>:	> On Apr 21, 2016, at 3:00 PM, Keromytis, Angelos (b) (6) wrote:
>>>;	> See numbers below.
>>>	> Dr. Angelos D. Keromytis
	> Program Manager > DARPA/Information Innovation Office
>>>>	> 675 N. Randolph Street, Arlington, VA 22203-2114
	$\frac{Tel:}{(b)} (6)$
>>>	
>>>>	>
>>>>	
>>>>	> On Apr 21, 2016, at 2:54 PM. Rodney Joffe <rjoffe@centergate.com> > wrote:</rjoffe@centergate.com>
>>>>	
	>> Angelos
>>>>	
>>>> >>>>	>> Are you still around in DC?
	What is a better way of contacting you than email? I keep meaning to call you to set up time but get
	racked.
	>> 1 am on(b)(6)
>>>>	
>>>	>>
>>>>	>>> On Apr 13, 2016, at 6:00 PM, Keromytis, Angelos (b) (6) wrote:
>>>>	>>> Thanks Mano.
>>>>	***
>>>>	>>> Rodney, very pleased to meet you.
eithe	>>> This Friday may work, if you're available late in the afternoon (3:30pm or later). Next Friday works too, r morning or similarly late (4pm or after). Next Thursday may also work in the afternoon.
	>>> -Angelos
>>>>	
>>>	
>>>>	>>> On Apr 13, 2016, at 2:36 PM, Rodney Joffe <rjoffe@centergate.com></rjoffe@centergate.com>
	>>> wrote:
	>>>> Manos, Thanks for the introduction.
	>>>> Angelos, pleased to meet you And happy to meet in person. My office is next to the White House
A)B) on 18th/Penn.
	>>>> When would you like to meet? I have openings this Friday, then some gaps at the end of next week.
	>>>>
>>>	>>>> Regards
>>>>	>>>> Rodney
>>>	>>>>
	>>>>> On Apr 13, 2016, at 2:02 PM, Manos Antonakakis <manos@gatech.edu> wrote:</manos@gatech.edu>
>>>	out the relation of the relation of the second

```
>>>>>>> Hey Rodney,
>>>>>> Angelos, Rodney is one of the most important persons when we talk
>>>>>>> about operational security (vis-a-vis, lets get stuff done). Not sure
>>>>>> highlights.
>>>>>> Rodney and Angelos, you are both local in DC. Rodney, Angelos is
>>>>>>> spare some time from your busy schedule and have a discussion with
>>>>>>> Angelos. I know you have access to other datasets that might interest
>>>>>> him, but I will leave this discussion up to you two.
>>>>>> Manos
>>>>>>
>>>>>>
>>>>
>>>
>>
```

>

From:	Keromytis, Angelos
To:	Rodney Joffe
Cc:	(b) (6) contr-i20)
Subject:	Re: introduction
Date:	Tuesday, January 10, 2017 12:45:16 PM

I was thinking of coming over, and 20 minutes out of respect for her time. I'd be happy to do longer and/or at DARPA.

-Angelos

From: Rodney Joffe Sent: Tuesday, January 10, 2017 10:04 AM To: Keromytis, Angelos Cc: Patel, Tejas (contr-i2o) Subject: Re: introduction

Angelos, unless you were planning otherwise, I thought it would be great if you invited her to Randolph St, dog and pony show. But 20 minutes sounds like you just want a phone conversation?

Or were you thinking of coming to one of our offices? If so, she spends time at her office in DC next to the White House, or the office in Tysons corner, or on the main campus in sterling where we have a secure facility cleared to TS.

Let me know

Thanks Rodney

On Jan 10, 2017, at 9:47 AM, Naperkoski, Valerie <<u>Valerie.Naperkoski@neustar.biz</u>> wrote:

Hi (b) (6) Would Angelos like to schedule a call or face-to-face meeting? Thanks. Val From: Keromytis, Angelos [mailto:angelos.keromytis@darpa.mil] Sent: Tuesday, January 10, 2017 8:41 AM To: Hook, Lisa <Lisa.Hook@ncustar.biz> Cc: Joffe, Rodney <<u>Rodney.Joffe@neustar.biz</u>>; Naperkoski, Valerie <Valerie.Naperkoski@neustar.biz>; Gregory, Liebe <Liebe.Gregory@neustar.biz>; (b) (6) (contr-i2o) (b) (6) Subject: Re: introduction Lisa. thank you. Val. Liebe. (b) (6)(cc'ed) will coordinate on my side. Safe travels. -Angelos

On Jan 10, 2017, at 6:53 AM, Hook, Lisa <<u>Lisa.Hook@neustar.biz</u>> wrote:

Dr. Keromytis,

Absolutely. I am on the road until the last week of January and happy to meet then, and can speak by phone prior if you want. Copying Val/Liebe to schedule. Looking forward to meeting you. Lisa

Lisa A. Hook Neustar, Inc. / President and Chief Executive Officer 21575 Ridgetop Circle Sterling, VA 20166 Office: +1.571.434.5630 Mobile: +1.202.907.5672 Fax: +1.571.434.5489 / lisa.hook@neustar.biz / www.neustar.biz

On Jan 10, 2017, at 01:08, Keromytis, Angelos (b) (6) wrote:

Lisa,

We haven't met, but you may have heard of some of the work going on at DARPA. Neustar and Rodney have been very helpful in the past few months, and I'd like to thank you for that.

I was wondering if I could get 20 minutes of your time at some point in the near future.

Best,

Dr Angelos D. Keromytis

Program Manager, Information Innovation Office (I2O) DARPA

675 N. Randolph Street Arlington, VA 22203



 From:
 Keromytis, Angelos

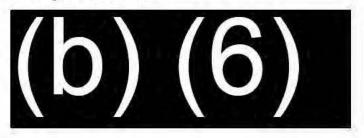
 To:
 Rodney Joffe

 Subject:
 Re: Oh, forgot

 Date:
 Thursday, March 2, 2017 7:36:46 AM

I don't tell people how to dress — they'll come in all shapes and garments. I'll be my usual :)

Dr Angelos D. Keromytis Program Manager, Information Innovation Office (I2O) DARPA 675 N. Randolph Street Arlington, VA 22203



On Mar 1, 2017, at 10:37 PM, Rodney Joffe <rioffe@centergate.com> wrote:

Dress is geek casual at sterling campus. Jeans are common.

```
lookups).
>
>
>
    CIRCL (small);
>
>
    PassiveDNS.cn (via Qihoo 360, this is CN CERT's passive DNS
>
    project for China. For research, I'd avoid this, since China
>
    conducts DNS poisoning, making the data unusable for most
>
    purposes. It's probably great for censorship studies, hoewever,
    since it potentially offers a fairly complete collection of CN
>
>
    network censorship events!).
>
>
    Mnemonic;
>
>
    PassiveTotal (small);
>
>
    RiskIQ (commercial/ad oriented);
>
>
    TCPIPUtils (and various small relates sites, e.g., domaintools
>
    even offers a passive DNS set, etc. Hurricane Electric has a
>
    small passive DNS offering, etc.)
>
>
    Some of the AV companies (e.g., AVG, Trend, etc.). These are not
>
    generally commercially available, but they might work with DARPA.
>
    Ask if you need introductions. Many of the "smaller" open
>
    recursives are exiting the market now or selling their recursives
>
    (and data feeds) to the security industry.
>
> I mention these other small projects because there's a useful long
> tail to passive DNS data, which collect from different network
> locations, user populations, etc. In some research, every passive DNS
> source may turn out to be useful. Chris Lee, formerly of GT and now
> in the Virginia area, offers a nice API for collecting these.
>
> And of course APT attacks result in DNS behavior on corporate
> recursives, often just a single packet, which are *never* shared with
> passive DNS collectors. There's a small community of researchers that
> share/trade these indicators. These APT data sources are not yet
> commodity/public, and are often silo'd unfortunately. There are a few
> very small "APT indicator feeds" that are public, but are essentially
> derivations of whitepapers and mailing lists/public knowledge.
>
> There's also another passive DNS data set, far larger than FarSight
> (and likely very affordable), but it's not yet public/commercially
> available. We're working to connect you with the owner, consistent
> with various NDAs that prevent us from sharing more details. IMHO,
> this new source would be your first goto for passive DNS, if/when it
> becomes available.
>
> I will follow up more if we can connect you to the new DNS data
> source. Else, the list above is a good summary of public and
> commercial passive DNS data sources.
>
> Hope this helps,
>
> ---
> David Dagon
> dagon@sudo.sh
```

From:	Keromytis, Angelos
To:	Rodney Joffe
Cc:	(b) (6) (contr-i20)
Subject:	Re: Thank you
Date:	Thursday, March 2, 2017 10:01:59 PM
	and the second of the second se

Rodney, thank *you*. This was truly great and eye opening for us!

Dr Angelos D. Keromytis Program Manager, Information Innovation Office (I2O) DARPA 675 N. Randolph Street Arlington, VA 22203



On Mar 2, 2017, at 8:27 PM, Rodney Joffe <rioffe@centergate.com > wrote:

Angelos,

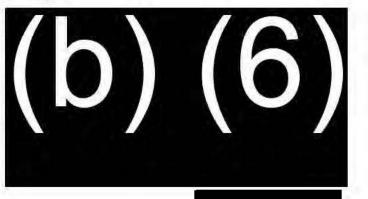
Thanks for getting the team over to see us today. I've never been present at a meeting like this at Neustar. We've never shared so much and it was mostly eyeopening and educational for me, and many of our folks! So we benefitted enormously as well.

I am providing below the email addresses of all of our attendees - your guys were looking for the info. In addition our people would like to get the contact info from your team ;-)

Could you please provide the equivalents, where they are comfortable :-)?

Looking forward to following up. Enjoy your trip to Australia!

Regards Rodney



From: To:	Keromytis, Angelos (b) (6) SA USAF AFOSI AFOSI /3 FIS/CI&O Antonakakis, Manos; dagon@sudo.sh; Farrell, Michael D(0) (b) Schneck, Christopher (contr-i2o); Demar, Jeremy
Cc:	(b) (c) $CIV USAF AFOSI AFOSI/3 FIS/CIO (b) (6) (contr-i2o)$
Subject:	RE: Visit and Talk?
Date:	Thursday, June 28, 2018 11:36:58 AM
l can't do a ca Cheers, -Angelos	dl on the morning of July 13, but either (b) (6) or Chris should be able to.
Original I From: (b) (6	
	ikis, Manos <manos@gatech.edu>; dagon@sudo.sh; Farrell, Michael D</manos@gatech.edu>
	rell@gtri.gatech.edu>; Keromytis, Angelos (b) (6); (b) (6)
(b) (6)	; Schneck, Christopher (contr-i2o) <christopher.schneck.ctr@darpa.mil>; Demar,</christopher.schneck.ctr@darpa.mil>
Ce: (b) (6)	nar3@gatech.edu> CIV USAF AFOSI AFOSI/3 FIS/CIO (b) (6) Visit and Talk?
Hey Manos,	
	ow about the 13th then? Maybe we can meet sometime in the morning/early afternoon so (b) (6) and 1 at home that afternoon/evening so our families so don't kill us for traveling so much :)
(share) and th	lon't think we want to do anything formal just have a talk about tactics and methods as best we all can then perhaps have a discussion on what things are helpful to our mission/operation and what other things take advantage of that maybe you all aren't aware of.
	eat relationship with Angelos and his folks so obviously we welcome their involvement but if this is ce maybe they can even dial in?
_(b) (6)	
Original I	Message
From: Antona	akakis, Manos [mailto:manos@gatech.edu]
To: (b) (6)	y, June 26, 2018 8:55 PM SA USAF AFOSI AFOSI/3 FIS/CI&O (b) (6); dagon@sudo.sh; ael D <michael.farrell@gtri.gatech.edu>; Keromytis, Angelos D CIV DARPA (US)</michael.farrell@gtri.gatech.edu>
(b) (6)	(contr-i2o)
<christopher.< td=""><td>schneck.ctr@darpa.mil>; Demar, Jeremy <jdemar3@gatech.edu></jdemar3@gatech.edu></td></christopher.<>	schneck.ctr@darpa.mil>; Demar, Jeremy <jdemar3@gatech.edu></jdemar3@gatech.edu>
Ce: (b) (6)	CIV USAF AFOSI AFOSI/FIR 7/FIS 3 < (b) (6)
Subject: [Nor	n-DoD Source] Re: Visit and Talk?

	(h)	(6)
lev		(\mathbf{O})

Happy to host you in my lab. I will be in DC on the 9th and 10th of July for sure. The chances are that I will be able to get the first flight on the 11th and be at the lab by 9.30am or so. The 12th and 13th will work for sure.

DARPA PM team, 1 am CCing you just as an FYI. You are more than welcome to attend, if you wish.

Thanks,

From:	Pierce, Brian
To:	rjoffe@centergate.com
Cc:	Keromytis, Angelos
Subject:	Thanks
Date:	Sunday, March 5, 2017 4:06:54 PM

Dear Rodney,

Thank you again for hosting the very informative set of briefings at your facility in Sterling. 1 am impressed with what you have achieved and where you are going. 1 will be following up with Angelos on paths forward.

I mentioned a couple of programs in our office that are network-related, with top-level information as follows:

Edge-Directed Cyber Technologies for Reliable Mission Communication (EdgeCT) http://www.darpa.mil/program/edge-directed-cyber-technologies-for-reliable-mission-communication

Extreme DDoS Defense (XD3) http://www.darpa.mil/program/extreme-ddos-defense

Dr. Stuart Wagner is the Program Manager for these two programs.

Also, in case you have not looked at our Open Catalog of technical papers and open source software generated by programs in our office, I provide the link: https://opencatalog.darpa.mil/

The XDATA program has developed a large number of data science tools that are in this catalog: https://opencatalog.darpa.mil/XDATA.html

The Memex program is developing greatly enhanced web search to include the deep and dark parts of the web, and has tools in the catalog: https://opencatalog.darpa.mil/MEMEX.html

Sincerely, Brian

Brian M. Pierce, PhD Deputy Director Information Innovation Office (I2O) DARPA



(b) (6)	(contr-sid)
Subject:	Understanding Requirements
Location:	09-106, 675 North Randolph St, Arlington, VA 22203
Start:	Thu 3/23/2017 11:00 AM
End:	Thu 3/23/2017 11:30 AM
Show Time As:	Tentative
Recurrence:	(none)
Meeting Status:	Not yet responded
Organizer:	Keromytis, Angelos
Required Attende	esHall, John <john.hall@neustar.biz>; Rodney Joffe; (D) (6)contr i2o)</john.hall@neustar.biz>
Optional Attende	

Rodney and John:

You can use me as the POC tomorrow. In case you need to pass clearances, the information is available at http://www.darpa.mil/policy/visitor-information.

1



From: Antonakakis, Manos <manos@gatech.edu> Sent on: Monday, June 15, 2020 7:06:30 PM To: Connolly, Robert <robert.connolly@police.gatech.edu> Subject: Fw: Follow up from DOJ

Chief, I forgot to CC you in this email. This is just FYI-

Thanks,

Manos Antonakakis, Ph.D. | manos@gatech.edu College of Engineering Dean's Professorship Chair and Associate Professor Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS) School of Electrical and Computer Engineering | Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Antonakakis, Manos <manos@gatech.edu> Sent: Monday, June 15, 2020 1:46 PM To: Wasch, Kate Cc: McLaughlin, Steven W; Abdallah, Chaouki T Subject: Re: Follow up from DOJ

Hey Kate, thank you for your note.

I am very busy with EA for at least until the end of July. I was planning to take some time off after these major EA milestones ahead of us, and then I will be starting a new research project on 5G security with DARPA as the PI. This means I will have to handle contractual and other management issues around bootstrapping this new large DARPA research project. All these means that I will not be able to do potentially meaningful work (and this depends on what the actual ask from DoJ really is) until September for this investigator.

Now, neither member of my team nor me will talk to anyone *until* I get explicit direction from the Dean of COE and/or EVPR that GT wants my team to get involved in this investigation. Assuming we end up as GT helping out DoJ in this investigation, I would like to understand how GT (Steve and Chaouki) plans to protect me and my researchers when our attribution analysis become public and we have extreme people from either the far right (i.e., KKK) or the far left (i.e., Antifa) --- that do not like our findings for whatever reason --- come visiting us in our homes.

When I get answers to all these, then we can schedule a call with the DoJ investigator about what explicitly they want us to do. For that call, I would like someone from GT legal to be on the call, just in case the discussion goes down a path that could be potentially damaging for GT's reputation (i.e., the DoJ is borderline unethical or even illegal). It would not be fair for just me to be responsible for that.

Thanks,

FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Wasch, Kate <kate.wasch@legal.gatech.edu> Sent: Monday, June 15, 2020 1:13 PM

Manos Antonakakis, Ph.D. | manos@gatech.edu

College of Engineering Dean's Professorship Chair and Associate Professor

Co-Director Center for Cyber Operations Enquiry and Unconventional Sensing (COEUS)

School of Electrical and Computer Engineering | Georgia Institute of Technology

To: Dagon, David S; Antonakakis, Manos Subject: Follow up from DOJ

Good afternoon, gentlemen. DARPA confirmed in a telephone call with us that you may speak to the DOJ and their investigator. Please let me know if you are willing to do so.

Kate Wasch Chief Counsel Employment & Litigation Office of Legal Affairs Georgia Institute of Technology Atlanta, GA 30332-0495 (404)894-4812

Most communications to or from Georgia Tech employees are a public record and available to the public and the media upon request under Georgia's broad open records law. Therefore, this e-mail communication and any response may be subject to public disclosure. From: Antonakakis, Manos <manos@gatech.edu> Sent on: Wednesday, May 13, 2020 7:10:15 PM To: Egerstedt, Magnus <magnus.egerstedt@ece.gatech.edu>; Keromytis, Angelos D <angelos@gatech.edu> CC: McLaughlin, Steven W <swm@coe.gatech.edu>; Abdallah, Chaouki T <ctabdallah@gatech.edu> Subject: Fw: HR001120S0026-OPS-5G-FP-010-Notification Letter Attachments: FP010.pdf (84.45 KB)

Some good news in these crazy times. Attached please find the notice for a contract award selection from DARPA. This will likely be a new ~\$7.3M/4y project under the title PRogrammable INfrastructure for CounterIng Pugnacious Adversaries on a Large Scale (PRINCIPALS) on the OPS-5G program at DARPA I2O.

ALL credit should go to Angelos for conceptualizing the idea and executing the proposal. Kudos, Angele!

Manos Antonakakis | Associate Professor | manos@gatech.edu School of Electrical and Computer Engineering Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: OPS-5G <ops-5g@darpa.mil> Sent: Wednesday, May 13, 2020 1:58 PM To: Antonakakis, Manos <manos@gatech.edu> Cc: OPS-5G <ops-5g@darpa.mil> Subject: HR001120S0026-OPS-5G-FP-010-Notification Letter

Dear Dr. Antonakakis,

Please see the attached file regarding your proposal submission (HR001120S0026-OPS-5G-FP-010) that was submitted to the Open Programmable Secure 5G (OPS-5G) solicitation, HR001120S0026.

Regards,

DARPA/I2O

I am sending this to you since you were not on the initial e-mail. I understand Anita and Chris have discussed with you.

Lucy

LUCY K. YARBROUGH Contracting Officer Office of Sponsor Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30332-0415 Email: lucy.yarbrough@osp.gatech.edu

Phone: 404-385-2084 **please leave voice message** Cell: 470-925-6816 FAX: 404-385-0864/5945 From: Roberts, Chris M. Sent: Thursday, July 30, 2020 4:09 PM To: Yarbrough, Lucy <Lucy.Yarbrough@osp.gatech.edu>; 'Smith, Kyle L' <kyle.smith@security.gatech.edu>; Arnold, Paul <paul.arnold@gtri.gatech.edu> Cc: Pavadore, Anita H. <anita.pavadore@gtri.gatech.edu>; Cyber Security Compliance Team <compliance@security.gatech.edu>; Barney, Diane <diane.barney@osp.gatech.edu> Subject: Re: SSP for Royal

This is for Darpa-Royal. Roberta Burke is read into this project.

Thank you,

Chris M. Roberts Techniques Branch Chief Georgia Tech Research Institute CIPHER | Techniques Branch 404.407.8378 (office) 404.844.8236 (cell)

From: "Yarbrough, Lucy" <Lucy.Yarbrough@osp.gatech.edu> Date: Thursday, July 30, 2020 at 3:59 PM To: "'Smith, Kyle L'" <kyle.smith@security.gatech.edu>, "Arnold, Paul" <paul.arnold@gtri.gatech.edu> indirect rates must be applied to the effort. No interdivisional transfer is necessary and an RI SSP is not required.

From: Arnold, Paul <paul.arnold@gtri.gatech.edu> Sent: Thursday, July 30, 2020 1:48 PM To: Smith, Kyle L <kyle.smith@security.gatech.edu> Cc: Roberts, Christopher M <Chris.Roberts@gtri.gatech.edu>; Pavadore, Anita M <anita.pavadore@gtri.gatech.edu> Subject: SSP for Royal

Hey Kyle,

GTRI will start a new research project called Royal ~ Oct 2020. We will be working with Campus and Professor Angelos Keromytis in ECE.

We need a System Security Plan (SSP) to deliver to our Sponsor (DARPA). Additionally, I understand we'll need a Report on Compliance (ROC).

Can you help us with these documents or point me to the right person? Thanks Kyle.

Best,

Paul

Paul J. Arnold Associate Division Chief, Network Vulnerability Division Cybersecurity, Information Protection, and Hardware Evaluation Research (CIPHER) Laboratory Georgia Tech Research Institute Work: 404.407.8418 Mobile: 858.335.4303 From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Monday, August 24, 2020 5:02:41 PM

- To: McLaughlin, Steven W<swm@coe.gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu>; Egerstedt, Magnus<magnus.egerstedt@ece.gatech.edu>
- CC: Keromytis, Angelos D<angelos@gatech.edu>

Subject: Fwd: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse

Steve/Chaouki, I do not need you to do anything. I am just trying to get OSP to work with us on this.

While it is sad that I have to name-drop you in this email, but your names might just help us get some answers.

Thanks,

Manos

Begin forwarded message:

From: "Antonakakis, Manos" <<u>manos@gatech.edu</u>> Subject: Re: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse

Date: August 24, 2020 at 11:56:45 AM EDT

To: "Mitchell, Michael F" <<u>michael.mitchell@ece.gatech.edu</u>> Cc: "Sibble, Dan J" <<u>Dan.Sibble@osp.gatech.edu</u>>, "Jackson, Timothy S" < <u>timothy.jackson@osp.gatech.edu</u>>, "Pilcher, Steven L" <<u>Steve.Pilcher@osp.gatech.edu</u>>, "Egerstedt, Magnus" <<u>magnus.egerstedt@ece.gatech.edu</u>>, "Melkote, Siri G" < <u>siri.melkote@ece.gatech.edu</u>>, "Butler, Angel D" <<u>angel.butler@osp.gatech.edu</u>>, "Custodio, Victoria N" <<u>victoria.custodio@osp.gatech.edu</u>>, "McLaughlin, Steven W" < <u>swm@coe.gatech.edu</u>>, "Abdallah, Chaouki T" <<u>ctabdallah@gatech.edu</u>>

Thanks Michael for the update. There is a major event (Hackathon) in November that I will need Roberto's help with. Our success in this Hackathon will secure our funding for Phase III of the HACCS project (next 18 months). We need these funds for many obvious reasons, some of which are, so we will not have to terminate the GRAs from our F1 international students.

This has been dragging on and on for many months. If Roberto (as UGA) is not under contract by October, then I will have to step in, and that will impact greatly (in a pure negative sense) a number of new funding activities I am working on.

I need a hard deadline for this so I can mitigate the risk. Can someone give me that? If we cannot do it, I need to explicitly know why this cannot be done, why we have not been informed about it sooner (so I can plan accordingly) and I would like to see the exact policies in places that blocks us from doing this sub contract with UGA (given the fact that Roberto is an expert on this project and part of it for the last two years).

A non-trivial amount of time was spent to fix HACCS, not only from me but from people in this thread. My reputation as a researcher and PI is on the line. Not intending to fail in the eyes of the sponsor without having a clear understanding who's fault this is internally at GT.

Steve, Chaouki; this is just an FYI-

Thanks,

On Aug 24, 2020, at 11:42 AM, Mitchell, Michael F < <u>michael.mitchell@ece.gatech.edu</u>> wrote:

Manos,

I am working with Tim, Dan, and Steve to get this done. The last document they need is the justification for selection and price reasonableness. I know that seems strange given that this is really more of a project continuation than a "new" subaward, but it is important for the contract auditors on this project. I will have this to them in a few moments and Tim has promised to make this a priority as soon as it goes through. Dan has promised to work out the issues with his contracting counterpart with the sponsor as well. Ideally this shouldn't take longer than a few days, but there are lots of moving parts.

I have spoken to Roberto and he is very sympathetic and understanding and has been very helpful, and is aware of the delays. Going forward I think we have a resolution in place for this to avoid this issue for any other subagreements. Michael

From:Antonakakis, Manos <<u>manos@gatech.edu</u>> Sent:Monday, August 24, 2020 11:31 AM

To:Sibble, Dan J <<u>Dan.Sibble@osp.gatech.edu</u>>

Cc:Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>; Jackson, Timothy S < <u>timothy.jackson@osp.gatech.edu</u>>; Pilcher, Steven L <<u>Steve.Pilcher@osp.gatech.edu</u> >; Egerstedt, Magnus <<u>magnus.egerstedt@ece.gatech.edu</u>>; Melkote, Siri G < <u>siri.melkote@ece.gatech.edu</u>>; Butler, Angel D <<u>angel.butler@osp.gatech.edu</u>>; Custodio, Victoria N <<u>victoria.custodio@osp.gatech.edu</u>> **Subject:**Po: Subjected Content in DAPRA : Pobavioral Engine for Detecting Network

Subject:Re: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse

Can I please get an update on this? When this will be done? Manos

On Aug 18, 2020, at 8:00 PM, Sibble, Dan < <u>Dan.Sibble@osp.gatech.edu</u>> wrote: Michael, et al, I will need the documents referenced by Tim (cost/price analysis and adequate selection memo) as soon as completed. These docs are necessary for the consent review/evaluation. Thanks, Dan Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947

Mobile: 404-987-6809

From:Jackson, Timothy
Sent:Tuesday, August 18, 2020 6:04 PM
To:Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>;
Pilcher, Steve <<u>Steve.Pilcher@osp.gatech.edu</u>>; Sibble, Dan <
Dan.Sibble@osp.gatech.edu>
Cc:Antonakakis, Manos <<u>manos@gatech.edu</u>>; Egerstedt, Magnus

<<u>magnus.egerstedt@ece.gatech.edu</u>>; Melkote, Siri G < <u>siri.melkote@ece.gatech.edu</u>>; Butler, Angel < <u>angel.butler@osp.gatech.edu</u>>; Custodio, Victoria < <u>victoria.custodio@osp.gatech.edu</u>> **Subject:**RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse

Good Evening All,

I will more than likely process this award when it is finally submitted in CIS. The past effort (D8553-S2) with Dr. Perdisci that Michael and I worked on was cancelled due to various issues. It seems that those issues have all been resolved on the current effort. Are these related? Michael, the process is identical to the last time when you and I worked together to get the sub award process going. You will need to submit a formal sub request that has a completed cost/price analysis and adequate selection memo along with the documents you have already provided. When you complete the submission, send me and email and I will grab it immediately. Looks like we are already working on the consent but we need the price/cost analysis among a few other certs to send over. Much of this will be provided once you submit a request in CIS. Thanks.

Respectfully,

Timothy Jackson|Contracting Officer-Subcontracts Office of Sponsored Programs|GeorgiaInstituteofTechnology -GTRI 926 Dalney Street, NW Atlanta, GA Office: 404.894.6954 or Cell: 404.710.0483|Fax: 404.385.0864| <image001.jpg>

From:Mitchell, Michael F

Sent:Monday, August 17, 2020 3:50 PM To:Pilcher, Steve; Sibble, Dan Cc:Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Butler, Angel; Custodio, Victoria Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse

Hey Steve & Dan, Attached are the budget justification, Budget, and SOW. What else do we need?

Μ

From:Pilcher, Steve <Steve.Pilcher@osp.gatech.edu> Sent:Monday, August 17, 2020 3:47 PM To:Sibble, Dan J < Dan.Sibble@osp.gatech.edu>; Mitchell, Michael F <michael.mitchell@ece.gatech.edu> Cc:Jackson, Timothy S <timothy.jackson@osp.gatech.edu>; Antonakakis, Manos <manos@gatech.edu>; Egerstedt, Magnus < magnus.egerstedt@ece.gatech.edu>; Melkote, Siri G < siri.melkote@ece.gatech.edu>; Butler, Angel D <</pre> angel.butler@osp.gatech.edu>; Custodio, Victoria N < victoria.custodio@osp.gatech.edu> Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for **Detecting Network Abuse** Mike, do you have this info requested below? Thanks Steven Pilcher, RAII/Sub Awards Manager Office of Sponsored Programs Georgia Institute of Technology Office: (404) 894-6939 Cell: (470) 990-0320

FAX: (404) 385-0864

From:Sibble, Dan

Sent:Monday, August 17, 2020 3:13 PM To:Pilcher, Steve; Simpson, Dana; Mitchell, Michael F Cc:Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Butler, Angel; Custodio, Victoria Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hi Steve, For the consent request please have your team provide me with the standard consent request information items that I'll need to provide the government with (i.e., SOW, Cost/Price Analysis, Cert). Thanks,

Dan

Dan Sibble Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

From:Butler, Angel Sent:Monday, August 17, 2020 11:23 AM To:Pilcher, Steve <Steve.Pilcher@osp.gatech.edu>; Simpson, Dana <<u>Dana.Simpson@osp.gatech.edu</u>>; Mitchell, Michael F < michael.mitchell@ece.gatech.edu>; Sibble, Dan < Dan.Sibble@osp.gatech.edu> Cc:Jackson, Timothy <timothy.jackson@osp.gatech.edu>; Antonakakis, Manos < <u>manos@gatech.edu</u>>; Egerstedt, Magnus < magnus.egerstedt@ece.gatech.edu>; Melkote, Siri G < siri.melkote@ece.gatech.edu>; Custodio, Victoria <</pre> victoria.custodio@osp.gatech.edu> Subject: RE: Subaward - GATech : DARPA : Behavioral Engine for **Detecting Network Abuse** Good Morning Steve, Dan Sibble is the assigned CO for this contract. I have included him in this email. //Break// Morning Dan, Can you assist the sub-awards team with obtaining consent to subcontract? Let me know if you need anything else. Thanks,

Angel

From: Pilcher, Steve

Sent:Monday, August 17, 2020 11:15 AM
To:Simpson, Dana; Mitchell, Michael F
Cc:Butler, Angel; Jackson, Timothy; Antonakakis, Manos;
Egerstedt, Magnus; Melkote, Siri G; Custodio, Victoria
Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for
Detecting Network Abuse
Good Morning,
I have spoken with Mike and here is way forward with this.
For the Subcontracts Group:
Mike is going to reinput the request for a subcontract against

D8553 into CIS. Tim/Victoria, please keep an eye out for that request. This is a hot item, in that the sponsor is getting frustrated with the lack of support from this UGA individual. For the Contract Group:

Angel, please let us know if you are the correct CO for this award. If so, we are going to need a consent to subcontract from the sponsor before we can finalize the subagreement ASAP.

Please let me know if you have any questions. Thanks

Steven Pilcher, RAII/Sub Awards Manager

Office of Sponsored Programs Georgia Institute of Technology Office: (404) 894-6939 Cell: (470) 990-0320 FAX: (404) 385-0864

From:Simpson, Dana

Sent:Monday, August 17, 2020 10:48 AM To:Mitchell, Michael F Cc:Butler, Angel; Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Pilcher, Steve Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse I have spoken with Steve Pilcher, Subaward Manager, about this. He will give you a call today. Dana Simpson Director, Operations Office of Sponsored Programs Georgia Institute of Technology Atlanta, Georgia 30332-0420 Phone: (404)894-6934 FAX: (404)385-0864

From:Mitchell, Michael F Sent:Monday, August 17, 2020 10:12 AM To:Simpson, Dana <<u>Dana.Simpson@osp.gatech.edu</u>> Cc:Butler, Angel <<u>angel.butler@osp.gatech.edu</u>>; Jackson, Timothy <<u>timothy.jackson@osp.gatech.edu</u>>; Antonakakis, Manos <<u>manos@gatech.edu</u>>; Egerstedt, Magnus < <u>magnus.egerstedt@ece.gatech.edu</u>>; Melkote, Siri G < <u>siri.melkote@ece.gatech.edu</u>>

Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse

Hey Dana,

We are trying to create a subagreement with UGA for D8553/AWD-100051. Dr. Perdisci, who we borrowed for the past two years, has returned to UGA, but his work and expertise is still critical for this project to succeed. UGA has agreed to apply for a subagreement with this to allow this to happen and they have reached out to GT to get the process done.

So far they have not heard anything from GT. I reached out to Timothy several times to give him a heads up that this was coming and to try and figure out where things are currently in the process, but I have received no response.

Can you assist us in figuring out where and why this process is stuck, and how we can avoid this going forward? Thanks!

Michael Mitchell

Research Operations Program Manager

GEORGIAInstitute of**TECH**nology

School of Electrical and Computer Engineering 777 Atlantic Drive NW Atlanta, GA 30332-0765 Office: 404-385-8122 Mobile: 770-655-8039

From: Mitchell, Michael F

Sent:Wednesday, August 12, 2020 10:57 AM To:Jackson, Timothy S <<u>timothy.jackson@osp.gatech.edu</u>> Cc:Butler, Angel D <<u>angel.butler@osp.gatech.edu</u>> Subject:RE: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hey Tim, Can I please have an update on this? It is essential that we get this set up so Dr. Perdisci can resume his work on this project. Thanks,

Michael

From:Mitchell, Michael F Sent:Monday, August 3, 2020 2:11 PM To:Jackson, Timothy S <<u>timothy.jackson@osp.gatech.edu</u>> Subject:FW: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hey Timothy, This is in response to our new request for a subagreement with UGA for D8553 (AWD-100051). I know that I reached out earlier

regarding getting approval from the sponsor for this, has there been any progress on this? Thanks!

Michael Mitchell

From:Heather Lyn Uhlman <<u>hluhlman@uga.edu</u>> Sent:Friday, July 31, 2020 2:18 PM To:Mitchell, Michael F < michael.mitchell@ece.gatech.edu> Subject:Subaward - GATech : DARPA : Behavioral Engine for **Detecting Network Abuse** Hi Michael, Dr. Perdisci indicated that this project submission might be delayed. Can you confirm and let me know when GATech will be submitting? Our Sponsored Projects office is requesting confirmation. Thanks! Heather Lyn Uhlman, M.Ed. Grants Coordinator II Department of Computer Science 418 Boyd Graduate Studies Research Center University of Georgial Athens, GA 30602 <image002.png>

From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Monday, August 24, 2020 7:35:17 PM

- To: McLaughlin, Steven W<swm@coe.gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu>; Egerstedt, Magnus<magnus.egerstedt@ece.gatech.edu>
- CC: Keromytis, Angelos D<angelos@gatech.edu>

Subject: Fwd: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse

Again, Gentlemen, you do not have to do anything about this. Just take it as an other data point how broken OSP is.

DARPA was not even aware that this request was made by Dan. Dan, was waiting to hear back from DARPA so we can move forward with the sub contract. And the kicker is this: When I talked to DARPA they said: "And why we need to know about this?"

I didn't say because nobody in OSP wants to make any decision, since if you make no decision, you cannot be wrong about anything. But ... I did looked like an idiot saying "Oh, new GT bureaucracy added to the system" ...

While I am approaching all these with a sense of humor, I am afraid it will take too much an effort to change the culture back to something that make GT a fun place to work in.

Chaouki/Steve, sadly, you have your hands very full. :(

Manos

Begin forwarded message:

From: "Antonakakis, Manos" <<u>manos@gatech.edu</u>> Subject: Re: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Date: August 24, 2020 at 2:28:22 PM EDT To: "Sibble, Dan J" <<u>Dan.Sibble@osp.gatech.edu</u>> Cc: "Mitchell, Michael F" <<u>michael.mitchell@ece.gatech.edu</u>>, "Jackson, Timothy S" < timothy.jackson@osp.gatech.edu>, "Pilcher, Steven L" <<u>Steve.Pilcher@osp.gatech.edu</u>>, "Egerstedt, Magnus" <<u>magnus.egerstedt@ece.gatech.edu</u>>, "Melkote, Siri G" < siri.melkote@ece.gatech.edu>, "Butler, Angel D" <<u>angel.butler@osp.gatech.edu</u>>, "Custodio, Victoria N" <<u>victoria.custodio@osp.gatech.edu</u>>

Dan, I just talked with DARPA HACCS PM team. They have not heard from GT on this subject. Please, reach out to Rachel (<u>rachel.dabrowski.ctr@darpa.mil</u>) about this one more time.

DARPA will be fine with this request, Tim. So, what else we need to do to finalize this?

Thanks, Manos

On Aug 24, 2020, at 1:23 PM, Antonakakis, Manos <<u>manos@gatech.edu</u>> wrote:

Great Dan. I will drop a note to Rachel today about this.

Tim, assuming DARPA says yes, please let me know what else do you need

from us to finalize this sub award.

Thanks, Manos

On Aug 24, 2020, at 1:19 PM, Sibble, Dan < Dan.Sibble@osp.gatech.edu> wrote:

Manos,

I have been communicating with the CO, Jennifer. Regarding your other questions I will let Tim advise on further requirements as the process at that point would happen at his level. **Tim**, can you advise Manos & Michael regarding the process forward after we have a response from DARPA and of any other requirements/documentation that they should be aware of. Thanks, Dan **Dan Sibble**

Contracting Officer Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

From: Antonakakis, Manos [mailto:manos@gatech.edu] Sent:Monday, August 24, 2020 12:58 PM To:Sibble, Dan <Dan.Sibble@osp.gatech.edu> **Cc:**Mitchell, Michael F <<u>michael.mitchell@ece.gatech.edu</u>>; Jackson, Timothy <<u>timothy.jackson@osp.gatech.edu</u>>; Pilcher, Steve <<u>Steve.Pilcher@osp.gatech.edu</u>>; Egerstedt, Magnus < magnus.egerstedt@ece.gatech.edu>; Melkote, Siri G < siri.melkote@ece.gatech.edu>; Butler, Angel <</pre> angel.butler@osp.gatech.edu>; Custodio, Victoria < victoria.custodio@osp.gatech.edu> Subject: Re: Subaward - GATech : DARPA : Behavioral Engine for **Detecting Network Abuse** Great, thanks Dan. Michael, please send these documents to Dan asap (today if possible), and let me know when you have done it. Dan, a few questions. Who is your PoC at DARPA that has all these information (Rachel, Perri, someone else)? Also, will you need any other documents from us between now and when DARPA comes back with an answer so we can move the sub award forward? Finally, if DARPA says yes, will OSP need anything else to get this sub award done? Thanks. Manos

> On Aug 24, 2020, at 12:51 PM, Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> wrote: Hi Manos, As Michael iterated earlier, this action just needs thejustification for selection and price

reasonableness documentation from you. I've communicated this request to my DARPA POC along with a description on why we need this action completed asap and she advised that she is poised to make a quick determination however she needs the information referenced above for her review. Please let Tim or myself know if there is anything we can do to assist in providing this information. Best. Dan Dan Sibble **Contracting Officer** Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809

From: Antonakakis, Manos [mailto:manos@gatech.edu] Sent:Monday, August 24, 2020 11:31 AM To:Sibble, Dan <<u>Dan.Sibble@osp.gatech.edu</u>> Cc:Mitchell, Michael F < michael.mitchell@ece.gatech.edu>; Jackson, Timothy <<u>timothy.jackson@osp.gatech.edu</u>>; Pilcher, Steve <<u>Steve.Pilcher@osp.gatech.edu</u>>; Egerstedt, Magnus < magnus.egerstedt@ece.gatech.edu>; Melkote, Siri G <<u>siri.melkote@ece.gatech.edu</u>>; Butler, Angel <<u>angel.butler@osp.gatech.edu</u>>; Custodio, Victoria <victoria.custodio@osp.gatech.edu> Subject: Re: Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Can I please get an update on this? When this will be done? Manos

> On Aug 18, 2020, at 8:00 PM, Sibble, Dan < Dan.Sibble@osp.gatech.edu > wrote: Michael, et al, I will need the documents referenced by Tim (cost/price analysis and adequate selection memo) as soon as completed. These docs are necessary for the consent review/evaluation. Thanks, Dan **Dan Sibble Contracting Officer**

Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809 From: Jackson, Timothy Sent: Tuesday, August 18, 2020 6:04 PM To:Mitchell, Michael F < michael.mitchell@ece.gatech.edu >; Pilcher, Steve < Steve.Pilcher@osp.gatech.edu >; Sibble, Dan < Dan.Sibble@osp.gatech.edu> Cc:Antonakakis, Manos < manos@gatech.edu>; Egerstedt, Magnus < magnus.egerstedt@ece.gatech.edu >; Melkote, Siri G < siri.melkote@ece.gatech.edu >; Butler, Angel < angel.butler@osp.gatech.edu >; Custodio, Victoria < victoria.custodio@osp.gatech.edu > Subject:RE: Subaward -GATech : DARPA : Behavioral Engine for Detecting Network Abuse Good Evening All, I will more than likely process this award when it is finally submitted in CIS. The past effort (D8553-S2) with Dr. Perdisci that Michael and I worked on was cancelled due to various issues. It seems that those issues have all been resolved on the current effort. Are these related? Michael, the process is identical to the last time when you and I worked together to get the sub award process going. You will need to submit a formal sub request that has a completed cost/price analysis and adequate selection memo along with the documents you have already provided. When you complete the submission, send me and email and I will grab it immediately. Looks like we are already working on the

Office of Sponsored

consent but we need the price/cost analysis among a few other certs to send over. Much of this will be provided once you submit a request in CIS. Thanks. Respectfully, Timothy Jackson **Contracting Officer-Subcontracts** Office of Sponsored Programs GeorgiaInstituteofTechnology -**GTRI** 926 Dalney Street, NW Atlanta, GA Office: 404.894.6954 or Cell: 404.710.0483|Fax: 404.385.0864 <image001.jpg>

From: Mitchell, Michael F Sent: Monday, August 17, 2020 3:50 PM To:Pilcher, Steve; Sibble, Dan Cc:Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Butler, Angel; Custodio, Victoria Subject:RE: Subaward -GATech : DARPA : Behavioral **Engine for Detecting Network** Abuse Hey Steve & Dan, Attached are the budget justification, Budget, and SOW. What else do we need? Μ

From:Pilcher, Steve <</pre> Steve.Pilcher@osp.gatech.edu > Sent:Monday, August 17, 2020 3:47 PM To:Sibble, Dan J < Dan.Sibble@osp.gatech.edu>; Mitchell, Michael F < michael.mitchell@ece.gatech.edu > Cc:Jackson, Timothy S < timothy.jackson@osp.gatech.edu >; Antonakakis, Manos < manos@gatech.edu>; Egerstedt, Magnus < magnus.egerstedt@ece.gatech.edu >; Melkote, Siri G < siri.melkote@ece.gatech.edu >; Butler, Angel D < angel.butler@osp.gatech.edu

>; Custodio, Victoria N < victoria.custodio@osp.gatech.edu > Subject:RE: Subaward -GATech : DARPA : Behavioral **Engine for Detecting Network** Abuse Mike, do you have this info requested below? Thanks Steven Pilcher, RAII/Sub **Awards Manager** Office of Sponsored Programs Georgia Institute of Technology Office: (404) 894-6939 Cell: (470) 990-0320 FAX: (404) 385-0864 From:Sibble, Dan Sent: Monday, August 17, 2020 3:13 PM To:Pilcher, Steve; Simpson, Dana; Mitchell, Michael F Cc:Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Butler, Angel; Custodio, Victoria Subject:RE: Subaward -GATech : DARPA : Behavioral **Engine for Detecting Network** Abuse Hi Steve, For the consent request please have your team provide me with the standard consent request information items that I'll need to provide the government with (i.e., SOW, Cost/Price Analysis, Cert). Thanks, Dan **Dan Sibble Contracting Officer** Office of Sponsored Programs Georgia Institute of Technology 926 Dalney Street, N.W. Atlanta, GA 30318 Office: 404-894-6947 Mobile: 404-987-6809 From:Butler, Angel

Sent:Monday, August 17, 2020 11:23 AM To:Pilcher, Steve <

Steve.Pilcher@osp.gatech.edu >; Simpson, Dana < Dana.Simpson@osp.gatech.edu >; Mitchell, Michael F < michael.mitchell@ece.gatech.edu >; Sibble, Dan < Dan.Sibble@osp.gatech.edu> Cc:Jackson, Timothy < timothy.jackson@osp.gatech.edu >; Antonakakis, Manos < manos@gatech.edu>; Egerstedt, Magnus < magnus.egerstedt@ece.gatech.edu >; Melkote, Siri G < siri.melkote@ece.gatech.edu >; Custodio, Victoria < victoria.custodio@osp.gatech.edu > Subject:RE: Subaward -GATech : DARPA : Behavioral **Engine for Detecting Network** Abuse Good Morning Steve, Dan Sibble is the assigned CO for this contract. I have included him in this email. //Break// Morning Dan, Can you assist the sub-awards team with obtaining consent to subcontract? Let me know if you need anything else. Thanks, Angel

From: Pilcher, Steve Sent: Monday, August 17, 2020 11:15 AM To:Simpson, Dana; Mitchell, Michael F Cc:Butler, Angel; Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Custodio, Victoria Subject:RE: Subaward -GATech : DARPA : Behavioral **Engine for Detecting Network** Abuse Good Morning, I have spoken with Mike and here is way forward with this. For the Subcontracts Group: Mike is going to reinput the request for a subcontract against D8553 into CIS.

Tim/Victoria, please keep an eye out for that request. This is a hot item, in that the sponsor is getting frustrated with the lack of support from this UGA individual. For the Contract Group: Angel, please let us know if you are the correct CO for this award. If so, we are going to need a consent to subcontract from the sponsor before we can finalize the subagreement ASAP. Please let me know if you have any questions. Thanks Steven Pilcher, RAII/Sub **Awards Manager** Office of Sponsored Programs Georgia Institute of Technology Office: (404) 894-6939 Cell: (470) 990-0320 FAX: (404) 385-0864

From:Simpson, Dana Sent: Monday, August 17, 2020 10:48 AM To:Mitchell, Michael F Cc:Butler, Angel; Jackson, Timothy; Antonakakis, Manos; Egerstedt, Magnus; Melkote, Siri G; Pilcher, Steve Subject:RE: Subaward -GATech : DARPA : Behavioral Engine for Detecting Network Abuse I have spoken with Steve Pilcher, Subaward Manager, about this. He will give you a call today. Dana Simpson **Director**, Operations Office of Sponsored Programs Georgia Institute of Technology Atlanta, Georgia 30332-0420 Phone: (404)894-6934 FAX: (404)385-0864

From:Mitchell, Michael F Sent:Monday, August 17, 2020 10:12 AM To:Simpson, Dana < Dana.Simpson@osp.gatech.edu >

Cc:Butler, Angel < angel.butler@osp.gatech.edu >; Jackson, Timothy < timothy.jackson@osp.gatech.edu >; Antonakakis, Manos < manos@gatech.edu>; Egerstedt, Magnus < magnus.egerstedt@ece.gatech.edu >; Melkote, Siri G < siri.melkote@ece.gatech.edu> Subject:RE: Subaward -GATech : DARPA : Behavioral **Engine for Detecting Network** Abuse Hey Dana, We are trying to create a subagreement with UGA for D8553/AWD-100051. Dr. Perdisci, who we borrowed for the past two years, has returned to UGA, but his work and expertise is still critical for this project to succeed. UGA has agreed to apply for a subagreement with this to allow this to happen and they have reached out to GT to get the process done. So far they have not heard anything from GT. I reached out to Timothy several times to give him a heads up that this was coming and to try and figure out where things are currently in the process, but I have received no response. Can you assist us in figuring out where and why this process is stuck, and how we can avoid this going forward? Thanks! Michael Mitchell **Research** Operations **Program Manager**

GEORGIA

Institute of**TECH**nology

School of Electrical and Computer Engineering 777 Atlantic Drive NW Atlanta, GA 30332-0765 Office: 404-385-8122 Mobile: 770-655-8039

From: Mitchell, Michael F

Sent:Wednesday, August 12, 2020 10:57 AM To:Jackson, Timothy S < timothy.jackson@osp.gatech.edu > Cc:Butler, Angel D < angel.butler@osp.gatech.edu>

Subject:RE: Subaward -GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hey Tim, Can I please have an update on this? It is essential that we get this set up so Dr. Perdisci can resume his work on this project. Thanks,

Michael

From:Mitchell, Michael F Sent:Monday, August 3, 2020 2:11 PM To:Jackson, Timothy S < timothy.jackson@osp.gatech.edu >

Subject:FW: Subaward -GATech : DARPA : Behavioral Engine for Detecting Network Abuse

Hey Timothy, This is in response to our new request for a subagreement with UGA for D8553 (AWD-100051). I know that I reached out earlier regarding getting approval from the sponsor for this, has there been any progress on this? Thanks! Michael Mitchell

From:Heather Lyn Uhlman < hluhlman@uga.edu> Sent:Friday, July 31, 2020 2:18 PM To:Mitchell, Michael F < michael.mitchell@ece.gatech.edu >

Subject:Subaward - GATech : DARPA : Behavioral Engine for Detecting Network Abuse Hi Michael, Dr. Perdisci indicated that this project submission might be

delayed. Can you confirm and let me know when GATech will be submitting? Our Sponsored

From:	"Antonakakis, Manos" GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB- ANTONAKAKIS>	
Santan		
Sent on:	Wednesday, January 26, 2022 8:55:17 PM	
To:	McLaughlin, Steven W <swm@gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu></ctabdallah@gatech.edu></swm@gatech.edu>	
Subject:	LOI from Cox	
Attachments: Document_2022-01-26_114052.pdf (1.52 MB)		

Steve and Chaouki, the most important people in the community never stop believing and supporting us.

Here is an example of their support. This letter will go towards our big DARPA proposal, which we will submit this week.

Thanks, Manos

From:Antonakakis, Manos<manos@gatech.edu>Sent on:Wednesday, January 26, 2022 9:00:27 PMTo:McLaughlin, Steven W<swm@gatech.edu>; Abdallah, Chaouki T<ctabdallah@gatech.edu>Subject:Our reputationAttachments: Document_2022-01-26_114052.pdf (1.52 MB)

Steve and Chaouki, the most important people in the community never stop believing and supporting us.

Here is an example of their support. This letter will go towards our big DARPA proposal, which we will submit this week.

Thanks, Manos

From: Carothers, Matt (CCI-Atlanta) <Matt.Carothers@cox.com>
Sent: Wednesday, January 26, 2022 15:51
To: Keromytis, Angelos D; Antonakakis, Manos; Mitchell, Michael F
Cc: Johnson, Velvet (CCI-Atlanta); Trickey, Linda (CCI-Atlanta-LD); Harvie, Christopher; Jonathan Cain
Subject: RE: SOW / Technical Analysis / Reps & Certs for GT review
And here's the LOI
Matt

From: Carothers, Matt (CCI-Atlanta)

Sent: Wednesday, January 26, 2022 10:15 AM

To: Keromytis, Angelos D <angelos@gatech.edu>; 'Antonakakis, Manos' <manos@gatech.edu>; 'Mitchell, Michael F' <michael.mitchell@ece.gatech.edu>

Cc: Johnson, Velvet (CCI-Atlanta) <velvet.johnson@cox.com>; Trickey, Linda (CCI-Atlanta-LD) <Linda.Trickey@cox.com>; Harvie, Christopher <CJHarvie@mintz.com>; Jonathan Cain <jonathan.cain@fisherbroyles.com>

Subject: SOW / Technical Analysis / Reps & Certs for GT review

Ok folks, we might be done? I think we just need to get you the signed letter of intent now.

- Matt

From: Keromytis, Angelos D <angelos@gatech.edu> Sent on: Friday, February 12, 2021 6:51:47 PM To: Abdallah, Chaouki T <ctabdallah@gatech.edu>; Beyah, Raheem A <rbeyah@coe.gatech.edu> CC: Antonakakis, Manos <manos@gatech.edu> Subject: our Research Scientists are also being successful... Attachments: FP-074 signed.pdf (143.28 KB)

Chaouki, Raheem, I hope you're doing well!

Just wanted to bring this to your attention, not so much because of the amount involved (~\$1.75M), but because this was led by Chaz Lever, a research scientist in our center. (Chaz turned down a tenure-track position to stay with us, after he got his PhD.)

This (training, retaining, and developing Research Scientists who care about research+impact) is a model we are heavily pursuing at our center, and it is predicated upon (and only possible because of) our reputation. Best,

-Angelos

Begin forwarded message:

>

> From: "Lever, Charles C" <chazlever@gatech.edu>

> Subject: Fwd: HR001118S0057-Office-Wide-BAA-FP-074 - Notification Letter

> Date: February 12, 2021 at 11:43:16 AM EST

> To: "Keromytis, Angelos D" <angelos@gatech.edu>, "Antonakakis, Manos" <manos@gatech.edu>, "Perdisci, Roberto" <perdisci@gatech.edu>

> Cc: "Mitchell, Michael F" < michael.mitchell@ece.gatech.edu>

>

> Hi Everyone,

>

> We've received official notification that our DARPA proposal was accepted. Here's the letter notifying us of the good news. :-)

>

>> Begin forwarded message:

>>

>> From: HR001118S0057 <HR001118S0057@darpa.mil>

>> Subject: HR001118S0057-Office-Wide-BAA-FP-074 - Notification Letter

>> Date: February 8, 2021 at 11:24:56 AM EST

>> To: "clever3@gatech.edu" <clever3@gatech.edu>

>> Cc: HR001118S0057 <HR001118S0057@darpa.mil>, "Sibble, Dan" <Dan.Sibble@osp.gatech.edu>

>>

>> Dear Dr. Lever,

>>

>> Please see the attached file regarding your proposal submission (HR001118S0057-Office-Wide-BAA-FP-074) that was submitted to the Information Innovation Office (I2O) Office-wide solicitation, HR001118S0057.

>>

>> Regards,

>> DARPA/I2O

>>

>

From: Antonakakis, Manos<manos@gatech.edu>

Sent on: Tuesday, June 1, 2021 4:51:50 PM

To: Abdallah, Chaouki T<ctabdallah@gatech.edu>; McLaughlin, Steven W<swm@gatech.edu>

Subject: Planning ahead for the new project

Gentlemen, hope you are doing great!

As I am preparing the budget/SOW for the new upcoming project (ETA: late 2021 or early 2020), I would like to hear your thoughts on a couple of open items around how I will structure this project. The project unfortunately grew significantly bigger (\$25M for 3 years, with an option for 2 additional years after that) than what I originally thought it would be and I am afraid that without careful planning we will come across issues when it comes to hiring, hardware hosting availability and the datasets we will have to procure for the entire program.

So, can I "steal" 30 minutes of your time to run you through the issues I see ahead of us, and pick your brain on how we could solve them? I would rather have this meeting now that I am planning the entire project rather after we have signed contracts/SOW with DARPA.

Thanks, Manos

From: Khan, Asif I<akhan40@gatech.edu>

Sent on: Monday, June 14, 2021 4:37:39 AM

- To: Egerstedt, Magnus<me70@gatech.edu>; ece_personnel@ece.gatech.edu
- CC: Beyah, Raheem A<rbeyah@coe.gatech.edu>; McLaughlin, Steven W<swm@gatech.edu>; Khan, Asif I<akhan40@gatech.edu>

Subject: Re: [ece_faculty] Congratulations to Asif Khan

Thank you, Magnus and everyone, for all of your warm wishes, and my super-star students, wonderful colleagues, collaborators, and mentors, gracious administrative staff, extremely supportive leadership, IEN, and IMAT for everything! These are indeed exciting times --- with semiconductors and microelectronics being a strategic national priority, the massive CHIPS acts, and anticipated tsunami of federal investments in these areas, and most importantly, Georgia Tech being at a sweet spot for taking up a leadership role for shaping the future of this field and related ones, nationally and globally.

Best,

Asif

Asif I. Khan, Ph.D. Assistant Professor School of Electrical and Computer Engineering School of Materials Science and Engineering (courtesy) Georgia Institute of Technology Web:<u>http://electrons.ece.gatech.edu/</u> Phone: 510-604-8219

From: <ece_faculty-request@lists.gatech.edu> on behalf of "Egerstedt, Magnus" <me70@gatech.edu> Date: Thursday, June 10, 2021 at 1:46 PM

To: "ece_personnel@ece.gatech.edu" <ece_personnel@ece.gatech.edu>

Cc: "Beyah, Raheem A" <rbeyah@coe.gatech.edu>, "McLaughlin, Steven W" <swm@gatech.edu>

Subject: [ece_faculty] Congratulations to Asif Khan

Dear colleagues,

Please join me in congratulating Asif Khan on being chosen for a DARPA Young Faculty Award. Asif is receiving this award for his research on ferroelectric field-effect transistors for embedded non-volatile memory applications. Ferroelectric field-effect transistors is one of the most-promising device technologies for artificial intelligence (AI) and machine learning (ML) hardware, due to its energy efficiency and compatibility with high-volume semiconductor manufacturing. The project will focus on solving the critical voltage problem of this device technology, by identifying and implementing new strategies for interface defect reduction in and the downscaling of the ferroelectric gate-dielectric stack.

Asif works on advanced semiconductor devices that will shape the future of computing in the post-scaling era. His research group currently focuses on ferroelectric devices in all aspects ranging from materials physics, growth, and electron microscopy to device fabrication, all the way to ferroelectric circuits and systems for AI/ML/data-centric applications. His early career work led to the first experimental proof-of-concept demonstration of a physical phenomenon, namely the negative capacitance, in ferroelectric materials, which can reduce the power dissipation in electronic devices below the 'fundamental' thermodynamic limit. Negative capacitance is currently a vibrant research area in materials science, condensed matter physics, and electrical engineering, and it is being pursued by all major semiconductor companies for advanced transistor technologies.

In the past, Asifhas received multiple awards, including the NSF CAREER Award (2021), the Intel Rising Star Award (2020), Qualcomm Innovation Fellowship (2012), TSMC Outstanding Student Research Award (2011), and the University Gold Medal from Bangladesh University of Engineering and Technology (2011). He was also named to the Center for Teaching and Learning Class of 1934 CIOS Honor Roll for his outstanding teaching in ECE8863 Quantum Computing Devices and Hardware in Fall 2020. His group currently consists of seven graduate students and two research staff members. They publish in flagship microelectronics conferences, such as the International Electron Devices Meeting (IEDM) and the Symposium on VLSI Technology, and injournals including*IEEE Electron Device Letters,IEEE Transactions on Electron Devices,Nature Electronics,Nature Materials*, and*Nano Letters*. His students received multiple international and Institute-level awards, including the IEEE EDS Masters Student Fellowship (Prasanna Ravindran, 2020) and the Georgia Tech ECE's Colonel Oscar P. Cleaver Award (Nujhat Tasneem, 2018, and Zheng Wang, 2017) for acing the PhD

we are prepared to provide detailed information as to why Mr. Dagon's activities which are the subject of the grand jury investigation are both within the scope of his employment, were authorized by his employer, and were for the benefit of the State of Georgia. Suffice it to say, through Mr. Dagon's efforts, Georgia Tech was able to attract and retain a multi-million-dollar research grant from the U.S. Department of Defense's Advanced Research Project Agency (DARPA), and to establish Georgia Tech as one of the leading research institutions with respect to information security and threats to national security.

We also want to reiterate that no one has done anything wrong or illegal. It may be a natural inclination for those who do not understand the collaborative role and interaction between government agencies and cybersecurity researchers to assume that any research into attacks on political parties or candidates would be outside the scope of employment, when in actuality looking at potential criminal conduct is very much what they do.

The Defense of the Durham Investigation Benefits the State of Georgia

While we represent Mr. Dagon and his interests, as we must under the applicable Canons of Ethics, our defense of the Mr. Dagon, an agent of the State of Georgia who was acting within the scope of his employment, necessarily and directly benefits the State of Georgia, and its preeminent research institution, the Georgia Institute of Technology. Without addressing the merits (or lack thereof) of the Durham investigation, the response to the grand jury investigation has been designed to protect the ability of Georgia Tech to continue to fulfill the goals and objectives of a highly sensitive DARPA contract, to expand funding for the work, and to continue to work with the federal government to disseminate critical national security information concerning cybersecurity threats to the nations' infrastructure. The defense of Mr. Dagon has served to protect the integrity and reputation of Georgia Tech, to enhance its ability to continue to attract high-quality information security researchers, professors, and others, and to maintain its well-earned reputation as a facility of higher education and research in the field of cybersecurity. Because the defense inures to the benefit of the State and Georgia Tech, it is similarly not a "gift" or "gratuity" to Mr. Dagon.

"Successful Defense"

The final issue is the fact that the Durham investigation is reportedly continuing, and therefore, as a technical matter, there has been no "acquittal" or final disposition of the case, and no final "no true bill" of Indictment issued with respect to Mr. Dagon.

A few observations here. First, we note that, pursuant to the Department of Justice Manual, Section 9-11.151, Mr. Dagon has been advised that he is NOT a target of the Durham investigation.³ He has been advised that his work with Georgia Tech is "within the scope of the grand jury's investigation," but that there is no evidence or accusation of criminal conduct by Mr. Dagon. The nature of the federal grand jury is such that it has broad investigative powers⁴

³ A "target" is a person as to whom the prosecutor or the grand jury has substantial evidence linking him or her to the commission of a crime and who, in the judgment of the prosecutor, is a putative defendant. Department of Justice Manual, Section 9-11.151

⁴ See, e.g., *Trump v. Vance*, 2020 U.S. Dist. LEXIS 150786, *35-36, __ F. Supp. 3d __, 2020 WL 4861980 ("the Supreme Court has stated that "[a] grand jury investigation is not fully carried out until every available clue has been run down and all witnesses examined in every proper way to find if a crime has been committed." *United States v. R. Enterprises, Inc.*, 498 U.S. 292, 297, 111 S. Ct. 722, 112 L. Ed. 2d 795 (1991) (quoting *Branzburg v. Hayes*, 408 U.S. 665, 701, 92 S. Ct. 2646, 33 L. Ed. 2d 626 (1972)). To this end, a grand jury can "investigate merely on

payment. Georgia Tech presented Mr. Dagon with yet another of these rarely bestowed awards for "Initiating team research to create a new thought leadership platform during the period January 1, 2015 to December 31, 2017" – *the exact period of time that is being examined by the Durham investigation.*

Work Performed by Mr. Dagon for Georgia Tech That is Subject to the Investigation

The work that Mr. Dagon did on attribution analysis of communications traffic, which relates to the current legal matter, involved research on the Democratic National Convention hack, the Advanced Persistent Threat-28 (APT-28) malware, analysis of potential attack traffic related to the 2016 election (including traffic between the Trump Organization, Spectrum Health, and Alfa Bank), and analysis of Yota phone communications traffic. This work is no less within the scope of Mr. Dagon's employment than the work he did on the Mariposa botnet.

Indeed, much of this work was done in preparation for and in fulfillment of the obligations of the multi-million-dollar DARPA contract he helped bring to Georgia Tech (and about which the University similarly issued a press release). To suddenly decide that this attribution work was "not within the scope of Mr. Dagon's employment" would, of course, put this funding at risk, and would similarly implicate any remedies or defenses the University may have under O.C.G.A. 50-21-25, not only with respect to the Durham investigation, but generally. In short, Mr. Dagon's attribution research was not a frivolous pursuit, but was integral to the research he secured for Georgia Tech. Any assertion to the contrary is disingenuous.

As we noted in our previous call, when Mr. Dagon undertook a thorough review of work related to the investigation, which was performed from the end of 2016 forward, *he discovered that almost all of the initial work performed by him was on behalf of Georgia Tech under the DARPA contract: the work related to queries submitted by the U.S. Department of Justice (DOJ) through DARPA regarding Russian communications between Alfa Bank and the Trump organization and Mr. Trump's use of a Russian Yota phone — the exact subject matter of the criminal Grand Jury subpoena that Mr. Dagon received from the Durham investigation. The requests were sufficient to require Mr. Dagon and Prof. Antonakakis ("Manos") to set up a file within the DARPA project called "DOJ" and a sub file called "Mueller" because they knew that these requests were coming from DOJ and being sent back (via DARPA) to DOJ and the Mueller investigation.*

This is precisely what the Durham investigators are looking at – the work Mr. Dagon did under the DARPA contract on behalf of Georgia Tech. In particular, the research that Mr. Dagon conducted on DNS records starting in late 2016 and continuing through early 2017, and the research he conducted related to the Yota phone were always conducted as part of Mr. Dagon's duties as a security researcher employed by Georgia Tech.

This work was in furtherance of his duties and obligations at Georgia Tech; it was for the benefit of Georgia Tech; and it was within the scope of his employment at Georgia Tech. In addition, his response to first the FBI/DOJ inquiries that were made through DARPA, and his later response to the grand jury subpoena and other investigative queries have always been within the scope of his employment and meticulously coordinated with his employer.

All of the initial meetings and discussions that Mr. Dagon held among security researchers and Internet service providers (ISPs) about the data that Georgia Tech would need to create a database for the analysis of DNS records and the methods that Mr. Dagon would use to analyze DNS records (not just related to the Trump Organization and Alfa Bank, but in general) were conducted on behalf of Georgia Tech. Indeed, Mr. Dagon's trip to the 2016 Messaging, Malware and Mobile Anti-Abuse Working Group (M3AAWG) meeting in Philadelphia, at which the initial discussions among researchers and ISPs took place regarding the DNC hack and analysis of traffic data, was a trip that was authorized and funded by Georgia Tech and was clearly within the scope of Mr. Dagon's employment.

Additionally, the queries against the database created under or in furtherance of the DARPA contract, including the specific queries made for or on behalf of the Department of Justice and/or its component agencies (including the FBI), as well as those made on behalf of the Department of Defense, were done as part of Mr. Dagon's work for Georgia Tech, and were within the scope of his employment. Mr. Dagon's work with respect to the Yota phones may also implicate grants that Mr. Dagon was instrumental in obtaining for Georgia Tech from other entities like the National Institutes of Standards and Technology (NIST), which related to the analysis of signatures and behavior of certain Internet of Things (IoT) devices. This was research for which Mr. Dagon was responsible for bringing in funds for Georgia Tech, and his associated research was conducted within the scope of Mr. Dagon's employment.

While Georgia Tech did not direct any specific inquiry or report, Mr. Dagon's DNS research in general – and the specific inquiries and analysis which are the subject of the Durham grand jury probe – are, and have always been, part of Mr. Dagon's work on behalf of Georgia Tech. Indeed, Georgia Tech benefits from – and has always benefited from – Mr. Dagon's work, as well as from the tremendous prestige, capabilities, and funding that Mr. Dagon has brought to Georgia Tech as a result of his world renown expertise and research, which are reflected in the award of the DARPA contract and the research which is the subject of the grand jury investigation.

This research is not something that Mr. Dagon undertook as a "frolic and detour" or for private commercial advantage. Indeed, as we discussed, even Mr. Dagon's use of the commercial entity "Glomar Research" was to conveniently purchase certain hardware for Georgia Tech research on behalf of the DARPA contract and his employer. Importantly, Mr. Dagon kept Manos and other officials at Georgia Tech apprised of his work, his research plans, and findings. There were ample opportunities for Georgia Tech to advise him during these months that this work was not something they wanted him to do or considered within the scope of employment. No one ever advised him of such. To the contrary, the insights gained from this work allowed Georgia Tech to select and price datasets for the DARPA project, making it all the more successful.

We have reviewed the DARPA contract that you provided (which was not the contract applicable to the DARPA work referenced in this letter), which lists Glomar Research as a subcontractor This reinforces that Mr. Dagon's use of Glomar Research was not unrelated to his work for Georgia Tech and was done for the benefit of Georgia Tech.



Since the initial subpoena was issued, Mr. Dagon received another subpoena from the Special Counsel for testimony, which culminated in several days of meetings with the Special Counsel's team and several days of grand jury testimony. The Special Counsel's investigation continues to this date; two indictments have been issued. The Special Counsel has advised Mr. Dagon that he will need to testify in at least one of these trials, which is currently expected to begin in July 2022.

Around the same time as the indictments, the identities of Messrs. Antonakakis and Dagon were revealed to the attorneys in the civil litigation filed by Alfa Bank, Russia's largest private bank, which is owned by oligarchs. Importantly, on September 23, 2021, GCL advised Georgia Tech that Mr. Dagon had received subpoenas for testimony and document production in this "John Doe" Florida Litigation, *Alfa Bank v. Doe*. This civil lawsuit presents many similar issues to the DOJ investigation discussed above.

GCL notified Mr. Christian Fuller, Senior Employment and Litigation Counsel at Georgia Tech, of the subpoenas and indicated that Mr. Dagon desired for GCL to also represent him in the civil matter. GCL was agreeable to doing so. Significantly, Mr. Fuller also indicated that his office preferred that GCL continue representing Mr. Fuller in connection with the civil subpoenas. *See* Exhibit 1.

After further correspondence between Mr. Fuller and GCL, Mr. Fuller informed GCL that it should reach out to the Georgia Department of Administrative Services ("DOAS") regarding payment for past and future payments associated with the DOJ investigation and the civil matter.

Clients have now retained the undersigned to ensure that they are equitably compensated and protected. Our Clients are fully entitled to reimbursement for reasonable past representation and future occurrences. I have reviewed all of the written correspondence between GCL and interested parties and write to clarify a few main points.

Mr. Dagon was acting within the scope of his employment

Initially, I understand that there was some question about whether Mr. Dagon was acting within the scope of his employment with Georgia Tech when he conducted the research at issue in these matters. Mr. Dagon was a Term Research Engineer II at all relevant points. Both the DOJ investigation and the civil lawsuit relate directly to activities performed by Mr. Dagon during the scope of his employment.

On September 28, 2020, GCL provided a detailed Memorandum to Georgia Tech outlining how these activities were also authorized *and directed* by other State agents. *See* Exhibit 2. Briefly, this Memorandum highlights how Mr. Dagon performed much of his work in preparation for and in fulfilment of the DARPA contract Mr. Dagon helped secure for Georgia Tech. Indeed, Mr. Dagon was presented with an award from Georgia Tech for "initiating team research to create a new thought leadership during the period of January 1, 2015 to December 31,

GLOBAL CYBER LEGAL LLC

Jody R. Westby, Esq.

4501 Foxhall Crescents, NW Washington, DC 20007 USA

Phone: 202.255.2700 Fax: 202.337.0063

October 11, 2021

Christian Fuller, Esq. Senior Counsel, Employment & Litigation Georgia Institute of Technology 760 Spring Street NW, Suite 324 Atlanta, Georgia 30332-0495

Dear Christian:

We were retained by Mr. Dagon on August 5, 2020, after he had received a subpoena for documents from the Grand Jury involved in the Durham investigation. My colleague, Mark Rasch, and I reached out to Ms. Wasch on August 11, 2020, and were finally able to have a call with her on August 17, 2020; she asked that we keep her informed. On a September 16 call, we also discussed Georgia Tech paying Mr. Dagon's legal fees, and we agreed to send Ms. Wasch an "undertaking agreement," which is another name for the Third Party Payor Agreement.

In an email from me to Ms. Wasch on September 22, 2020, regarding a draft letter from Global Cyber Legal to the prosecutor, I mentioned that I would be sending her the undertaking agreement later that day. In an email from Ms. Wasch to my colleague Mark Rasch and me on September 23, 2020 – the very next day – Ms. Wasch stated conclusively, "It is not clear to me that the work David did was undertaken in his role as a GT employee. He may have used data to which he had access by virtue of his employment at GT, but the work was not part of his GT duties. Therefore, we cannot agree to contribute to or pay his attorneys' fees."

We followed up with our letter of September 28, 2020, explaining why his work was, indeed, within the scope of employment and explained the legal jeopardy facing Georgia Tech. Ms. Wasch replied on September 30, stating, "I apologize; this is not how we understood the situation. We have talked with some others internally, and would like to discuss this further." She asked to have a call with us, which we did on October 1, 2020.

On October 7, 2020, we sent the Third Party Payor Agreement to Ms. Wasch and advised her of the amount of our fees at that time (\$60k), explained what they were for, and said our hourly rate was discounted to \$350/hour. On October 13, Ms. Wasch wrote to me and said, "It would be helpful if you can provide documentation that the work in question was requested by DARPA or was otherwise performed in the course of Mr. Dagon's employment with Georgia Tech."

In a note on October 21, 2020, I stated, "We have been working hard today on a document that will hopefully provide useful information to help support a change of position within the Attorney General's office." We sent this detailed letter on October 22, 2020, which included the chronology of events. The letter also detailed an email from Manos Antonakakis to Mr. Dagon

In other attorney fee award cases (in civil cases where the law permits the payment of attorney's fees), federal and Georgia courts have adopted the so-called "lodestar" test for determining whether fees are "reasonable." This test takes into account, not only the customary fee for similar work, but the sophisticated nature of the case, whether the case is one of "first impression" or is a routine matter, the level of skill and sophistication of counsel (on both sides), the difficulty of the case, and the level of knowledge necessary for a successful outcome.

This matter is one of the most complex investigations in history, pulling from investigations conducted by the FBI, Robert Mueller (the "Mueller investigation") and the House and Senate intelligence committees. It most certainly is not a routine matter and has drawn on our combined expertise regarding (a) the domain name system and legal issues regarding the use of that data, and (b) criminal prosecution and defense cases. This combination of experience is rare, and it is has been invaluable in Mr. Dagon's defense.

Under Georgia's lodestar test, we believe our fees are entirely reasonable in light of the sensitive and sophisticated nature of this investigation, as well as the potential harm, not only to Mr. Dagon, but also to Georgia Tech, DARPA, the millions of dollars in government contracts Georgia Tech may receive for this and similar research, and, finally, to the information security community at large. Our fees are substantially lower than rates charged by other counsel involved in this investigation and, indeed, those typically charged for complex white-collar cases like this, irrespective of jurisdiction.

In her May 10 letter, Ms. Wasch scolded me for providing "zealous representation without first consulting with OCG [sic]." The ethics rules not only require counsel to "act with commitment and dedication to the interests of the client and with zeal in advocacy upon the client's behalf" (see, e.g., Georgia Bar Rule 1.3), but they also preclude communications which would constitute a waiver of applicable privileges (e.g., Georgia Bar Rule 1.6). She then goes on to lecture me about DOAS and the successful defense requirement, nothing that "Otherwise, gratuitously reimbursing expenses for undefined justifications is an inappropriate use of public dollars." (There is her gratuities argument again, even though it has been rejected by the AG's Office.)

Ms. Wasch goes on to some extent in her May 10 letter regarding DOAS and her understanding of their requirements, even stating, "neither the Institute, the AG's Office, nor DOAS has received any evidence that Mr. Dagon was charged or indicted with any criminal offense." How does she know what DOAS has received? Again, no claim has been filed with DOAS, and the Institute is not a beneficiary of the DOAS policy. Moreover, being charged or indicted is not a requirement for DOAS reimbursement.

Ms. Wasch also incorrectly states, "To be eligible for DOAS reimbursement, the state employee's criminal matter must have been successfully defended; meaning the employee was acquitted or the matter dismissed *and* the action has been concluded." This is incorrect. The formation of a Grand Jury is not formally announced and neither is its dissolution. Neither the public nor counsel are informed of when a grand jury has concluded is work. Moreover, Mr. Dagon is entitled to legal representation before a grand jury even if he is not the target of a grand jury and is never indicted. Put simply, a federal grand jury investigation is a "criminal

Date	Personnel	Description of Activity	Hours
11/12/2020	Westby	Email executed docs to AUSA; review email from AUSA re response to letter & FBI interviews; t/c w/ M. Rasch	2.0
11/15/2020	Westby	Email response to AUSA re FBI interviews	0.2
11/18/2020	Rasch	Tel Call common counsel Westby	1.0
11/18/2020	Westby	Email B. Webb re fee issue; t/c w/ joint defense counsel;	1.2
11/20/2020	Rasch	Tel Call common counsel Westby	0.9
11/24/2020	Westby	Email B. Webb re fee issue; arrange for t/c;	0.2
11/25/2020	Rasch	Redraft Third Party Payor Agreement/Tel Call B Webb J Westby	3.2
11/25/2020	Westby	T/c w/B. Webb; revise third party payor agreement per $t/c w/B$. Webb; email to B. Webb	1.0
11/26/2020	Rasch	Meeting with J Westby	0.5
12/7/2020	Rasch	Meeting w J Westby RE Status, call w B. Webb, Draft letter to B. Webb	2.0
12/7/2020	Westby	T/c w/ D. Dagon; email B. Webb re status;	0.6
12/8/2020	Rasch	Call to K. Wasch; draft response to AUSA; call to J. Westby, redraft letter to B. Webb, mtg w J Westby	5.9
12/8/2020	Westby	T/c w/ joint defense counsel; review email from B. Webb & reply	0.7
12/20/2020	Rasch	Review Forbes Article Re Investigation, research Georgia constitution, gratuities clause	1.8
12/29/2020	Rasch	Tel Call w Common Counsel Re Investigation	1.0
12/29/2020	Westby	T/c w/ joint defense counsel re subpoenas to GJ	1.0
1/25/2021	Rasch	Tel cal w Common Defense, research BAA and joint defense issues,	1.0
1/25/2021	Westby	Email to B. Webb re legal fees; review BAA; forward to joint defense counsel; draft letter to B. Webb	2.7
1/26/2021	Westby	T/c w/ joint defense counsel re subpoena to GJ & documents produced; research reimbursement of legal fees by DOAS; draft letter to B. Webb	3.5
1/27/2021	Rasch	Draft Letter to Ling Ling Re: Scope of Independent Counsel Investigation, letter to B. Webb, DOAS policy and DARPA, Tel Call former GA AG Re: Indemnification	4.2
1/28/2021	Rasch	Research - scope of immunity, 18 USC 6001, act of production, agency	3.0
1/28/2021	Westby	Email joint defense counsel re 5th A & review replies; draft letter to B. Webb	4.5
1/29/2021	Rasch	Draft Letter to AG Webb RE Scope of Employment,	4.2

Date	Personnel	Description of Activity	Hours
3/14/2021	Westby	Review emails from joint defense re 5th A & reply	0.6
3/17/2021	Rasch	Research GT Policies, review docs from K Wasch and Ling Ling, fee research	1.9
3/19/2021	Rasch	Review DARPA contract and policies, tel cal w consulting counsel re DARPA reimbursement policies, duty to defend contract	4.2
3/19/2021	Westby	Review research on FAR & payment of legal fees	0.5
3/20/2021	Rasch	Research FAR requirements reimbursement of attorney fees	3.8
3/22/2021	Rasch	Research - GA AG Policies - Conflict of Interest and dual representation,	2.7
3/23/2021	Westby	Email K. Wasch re call to discuss fees;	0.2
3/26/2021	Westby	Email Ling-Ling & K. Wasch re legal fees; review reply	0.2
3/29/2021	Rasch	Tel Call w Common Defense Counsel, tel cal w J. Westby, follow up research	1.0
3/29/2021	Westby	T/c w/ joint defense counsel	0.5
3/30/2021	Westby	Email joint counsel; T/c w/ joint defense counsel; research BAA	1.3
3/31/2021	Westby	Review email from joint counsel; research response; reply	0.8
4/1/2021	Westby	Email K. Wasch & Ling-Ling re legal fees; review email from D. Lunon re legal fees	0.9
4/2/2021	Westby	Email to D. Lunon; email joint defense counsel	0.3
4/5/2021	Westby	Review email from D. Lunon re legal fee status	0.1
4/9/2021	Rasch	Draft letter to GT counsel re scope of employment; t/c	1.3
4/15/2021	Westby	Review draft letter to DOAS	0.3
4/21/2021	Westby	Review email from joint defense counsel; reply	0.2
4/21/2021	Rasch	Letter to DOAS, common counsel email	0.5
4/22/2021	Westby	Email D. Dagon re DOAS letter	0.2
4/26/2021	Westby	Email D. Lunon re legal fee issue	0.3
4/28/2021	Westby	Review email from D. Lunon re fees & reply	0.5
5/6/2021	Westby	Emails to joint defense counsel ; t/c w/ joint defense counsel	1.0
5/6/2021	Rasch	Tel Call w Common Defense Counsel re joint defense	1.4
5/7/2021	Westby	T/c w/ joint defense counsel; review emails from joint defense counsel & reply	1.0
5/8/2021	Rasch	Call w/ J. Westby re subpoena; review subpoena; call w/ D. Dagon re same	2.0

Date	Personnel	Description of Activity	Hours
7/20/2021	Westby	Review email from C. Fuller re note from DARPA GC & document production & reply; email DeF re testimony & documents; review email from DeF &	4.8
		reply; t/c w/ D. Dagon	
7/21/2021	Rasch	FRCrim P 6 research; tel call common counsel, tel cal w GA AG Beth Young, tel cal w J Westby	5.3
7/21/2021	Westby	Review emails from DOJ; review emails from joint defense counsel; review email from E. Young & reply; t/c w/ E. Young; review email from DeF & reply; t/c w/ M. Rasch; t/c w/ D. Dagon; t/c w/ DeF; review email from E. Young & GT subpoena; draft email to DeF re document production	4.8
7/22/2021	Westby	Review doc from D. Dagon; review emails from joint defense counsel; t/c w/ D. Dagon	1.4
7/23/2021	Rasch	Draft letter to DeFilippis re DARPA; tel cal common counsel; tel cal J Westby	5.0
7/23/2021	Westby	Review emails from E. Young & reply; email De F re document production; email E. Young re responsive documents; email D. Dagon	1.2
7/24/2021	Rasch	Review document production; tel call common counsel	4.7
7/24/2021	Westby	Review email from DeF & reply; t/c w/ joint defense counsel; t/c w/ D. Dagon	4.0
7/25/2021	Westby	Email DeF;	0.2
7/26/2021	Rasch	Review documents; research, tel cal w D Dagon, J Westby to prep for mtg w DeF and GJ	8.0
7/26/2021	Westby	Review email from E. Young re doc production & reply; review doc from D. Dagon; Review email from DeF re immunity & reply; review file; mtg w/ D. Dagon	7.0
7/27/2021	Rasch	Tel Call D Dagon to prep; letter to GA AG re document production, review documents	7.0
7/27/2021	Westby	Mtg w/ D. Dagon re DeF meeting & testimony; review emails from E. Young re docs & reply	8.0
7/28/2021	Rasch	Mtg w DeFilippis, mtg w D Dagon, tel calls joint counsel	10.0
7/28/2021	Westby	Mtg w/ DeF; mtg w/ Dagon; review email from joint counsel; joint counsel calls	12.0
7/29/2021	Rasch	Mtg w DeFilippis, mtg w D Dagon, GJ testimony, review docs, tel calls common interest; review Rhamnousia logs	11.2
7/29/2021	Westby	Mtg w/ DeF; GJ testimony; mtg w/ Dagon; review immunity order; review emails from E. Young re Rhamnousia chat logs & reply; t/c w/ joint defense counsel	11.8

Date	Personnel	Description of Activity	Hours
12/8/2020	Rasch	Call to K. Wasch; draft response to AUSA; call to J. Westby, redraft letter to B. Webb, mtg w J Westby	5.9
12/8/2020	Westby	T/c w/ joint defense counsel; review email from B. Webb &	0.7
12/20/2020	Rasch	reply Review Forbes Article Re Investigation, research Georgia	1.8
12/20/2020	Rusen	constitution, gratuities clause	1.0
12/29/2020	Rasch	Tel Call w Common Counsel Re Investigation	1.0
12/29/2020	Westby	T/c w/ joint defense counsel re subpoenas to GJ	1.0
1/25/2021	Rasch	Tel cal w Common Defense, research BAA and joint defense issues,	1.0
1/25/2021	Westby	Email to B. Webb re legal fees; review BAA; forward to joint defense counsel; draft letter to B. Webb	2.7
1/26/2021	Westby	T/c w/ joint defense counsel re subpoena to GJ & documents produced; research reimbursement of legal fees by DOAS; draft letter to B. Webb	3.5
1/27/2021	Rasch	Draft Letter to Ling Ling Re: Scope of Independent Counsel Investigation, letter to B. Webb, DOAS policy and DARPA, Tel Call former GA AG Re: Indemnification	4.2
1/28/2021	Rasch	Research - scope of immunity, 18 USC 6001, act of production, agency	3.0
1/28/2021	Westby	Email joint defense counsel re 5th A & review replies; draft letter to B. Webb	4.5
1/29/2021	Rasch	Draft Letter to AG Webb RE Scope of Employment,	4.2
1/29/2021	Westby	Research gratuities clause; finalize letter to B. Webb; email B. Webb w/ letter	3.5
1/30/2021	Rasch	Research - Trump Russia Cyberattack reports, news articles	3.3
2/3/2021	Westby	T/c w/ joint defense counsel	0.5
2/23/2021	Westby	Email Ling-Ling re legal fees	0.2
2/26/2021	Rasch	Tel Call S. Common Defense Counsel, Email re legal fees, Joint defense call w J. Westby	1.2
2/26/2021	Westby	Review email from K. Wasch re legal fee payment; discuss w/ M. Rasch; joint defense call; t/c w/ D. Dagon	3.3
2/28/2021	Westby	Review email from joint defense counsel; reply	0.2
3/1/2021	Rasch	Revise Letter to G Tech re legal fees, tel cal w J. Westby and common counsel	1.8
3/1/2021	Westby	T/c w/ joint defense counsel; send docs to joint defense	0.8
3/2/2021	Westby	T/c w/ joint defense counsel; review file; send docs; draft letter to GT re legal fees	1.6
3/3/2021	Westby	Conduct research re applicability of DNS data to wiretap, PR/TT, Stored Comm Act; draft note re findings; email M. Rasch re prep for call w/ B. Webb; Review email from B. Webb re legal fees	2.5

Date	Personnel	Description of Activity	Hours
3/4/2021	Rasch	Research DOAS policies/ Reimbursement, research SCA, trap	6.5
		and trace, tel cal w J. Westby; draft letter to AG re	
		reimbursement, draft letter to LL, tel cal D Dagon	
3/4/2021	Westby	T/c w/ D. Dagon; t/c w/ joint defense counsel; review letter to	3.0
2/5/2021	XX 7 .1	GT re legal fees; email D. Dagon re letter to GT re legal fees	2.5
3/5/2021	Westby	T/c w/ joint defense counsel (2); revise letter to GT to include $DO AS$ minutes and $DO AS$ minutes and $DO AS$ minutes and $DO AS$ minutes are set of the set of t	2.5
3/6/2021	Westby	DOAS reimbursement Research applicability of DNS data to pen register/trap trace &	1.3
5/0/2021	westby	stored comm act; email joint defense counsel re same	1.5
3/9/2021	Rasch	T/c w/ joint defense counsel; t/c w/ DOAS; research DNS	2.9
51912021	Ruben	record availability;	2.9
3/9/2021	Westby	T/c w/ DOAS re legal fee reimbursement	0.5
3/10/2021	Westby	Review email from joint defense re docs from Alice; email K.	1.5
5/10/2021	westby	Wasch & Ling-Ling re letter re legal fee offer	1.5
3/11/2021	Rasch	Tel call to D Dagon,	2.2
3/14/2021	Westby	Review emails from joint defense re 5th A & reply	0.6
3/17/2021	Rasch	Research GT Policies, review docs from K Wasch and Ling	1.9
		Ling, fee research	
3/19/2021	Rasch	Review DARPA contract and policies, tel cal w consulting	4.2
		counsel re DARPA reimbursement policies, duty to defend	
		contract	
3/19/2021	Westby	Review research on FAR & payment of legal fees	0.5
3/20/2021	Rasch	Research FAR requirements reimbursement of attorney fees	3.8
3/22/2021	Rasch	Research - GA AG Policies - Conflict of Interest and dual	2.7
		representation,	
3/23/2021	Westby	Email K. Wasch re call to discuss fees;	0.2
3/26/2021	Westby	Email Ling-Ling & K. Wasch re legal fees; review reply	0.2
3/29/2021	Rasch	Tel Call w Common Defense Counsel, tel cal w J. Westby,	1.0
		follow up research	
3/29/2021	Westby	T/c w/ joint defense counsel	0.5
3/30/2021	Westby	Email joint counsel; T/c w/ joint defense counsel; research	1.3
2/21/2021	W 7	BAA Designed with free size to be a second sec	0.0
3/31/2021	Westby	Review email from joint counsel; research response; reply	0.8
4/1/2021	Westby	Email K. Wasch & Ling-Ling re legal fees; review email from	0.9
4/2/2021	Weathy	D. Lunon re legal fees	0.3
4/2/2021	Westby	Email to D. Lunon; email joint defense counsel	0.3
	Westby	Review email from D. Lunon re legal fee status	
4/9/2021	Rasch	Draft letter to GT counsel re scope of employment; t/c	1.3
4/15/2021	Westby	Review draft letter to DOAS	0.3
4/21/2021	Westby	Review email from joint defense counsel; reply	0.2
4/21/2021	Rasch	Letter to DOAS, common counsel email	0.5

Date	Personnel	Description of Activity	Hours
7/17/2021	Westby	Review email from DeF re testimony; t/c w/ D. Dagon; t/c w/	2.4
		joint defense counsel	
7/19/2021	Rasch	Grand Jury Prep	2.0
7/19/2021	Westby	T/c w/ joint defense counsel; email D. Dagon re DOJ	0.8
		reimbursement; emails w/ joint defense counsel	
7/20/2021	Rasch	Subpoena duces tecum review; tel cal J Westby	4.0
7/20/2021	Westby	Review email from C. Fuller re note from DARPA GC &	4.8
		document production & reply; email DeF re testimony &	
		documents; review email from DeF & reply; t/c w/ D. Dagon	
7/21/2021	Rasch	FRCrim P 6 research; tel call common counsel, tel cal w GA	5.3
		AG Beth Young, tel cal w J Westby	
7/21/2021	Westby	Review emails from DOJ; review emails from joint defense	4.8
		counsel; review email from E. Young & reply; t/c w/ E.	
		Young; review email from DeF & reply; t/c w/ M. Rasch; t/c	
		w/ D. Dagon; t/c w/ DeF; review email from E. Young & GT	
E /22 /2021	XX 7 .1	subpoena; draft email to DeF re document production	1.4
7/22/2021	Westby	Review doc from D. Dagon; review emails from joint defense	1.4
7/23/2021	Decel	counsel; t/c w/ D. Dagon	5.0
//23/2021	Rasch	Draft letter to DeFilippis re DARPA; tel cal common counsel; tel cal J Westby	5.0
7/23/2021	Westby	Review emails from E. Young & reply; email De F re	1.2
112312021	westby	document production; email E. Young re responsive	1.2
		documents; email D. Dagon	
7/24/2021	Rasch	Review document production; tel call common counsel	4.7
7/24/2021	Westby	Review email from DeF & reply; t/c w/ joint defense counsel;	4.0
//24/2021	westby	t/c w/ D. Dagon	4.0
7/25/2021	Westby	Email DeF;	0.2
7/26/2021	Rasch	Review documents; research, tel cal w D Dagon, J Westby to	8.0
		prep for mtg w DeF and GJ	
7/26/2021	Westby	Review email from E. Young re doc production & reply;	7.0
		review doc from D. Dagon; Review email from DeF re	
		immunity & reply; review file; mtg w/ D. Dagon	
7/27/2021	Rasch	Tel Call D Dagon to prep; letter to GA AG re document	7.0
		production, review documents	
7/27/2021	Westby	Mtg w/ D. Dagon re DeF meeting & testimony; review emails	8.0
		from E. Young re docs & reply	
7/28/2021	Rasch	Mtg w DeFilippis, mtg w D Dagon, tel calls joint counsel	10.0
7/28/2021	Westby	Mtg w/ DeF; mtg w/ Dagon; review email from joint counsel;	12.0
		joint counsel calls	
7/29/2021	Rasch	Mtg w DeFilippis, mtg w D Dagon, GJ testimony, review	11.2
		docs, tel calls common interest; review Rhamnousia logs	

From: Sent: To: Cc: Subject: Schamel, Mark <MSchamel@lowenstein.com> Tuesday, July 20, 2021 3:23 PM Fuller, Christian; Jara, Ana Elizabeth Young RE: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Excellent. Thank you. Our plan is to send you a list of the dozen or so documents we would like to turn over to the special counsel. If you would not mind having those pulled and confirm, we will either forward a copy from you, or we can simply make our own informal production and send you a copy.

Whatever is easiest for you.

Mark

Mark E. Schamel Partner Lowenstein Sandler LLP

T: 202.753.3805 **M:** 202.841.3401 **F:** 973.597.2400



From: Fuller, Christian Sent: Tuesday, July 20, 2021 3:10 PM To: Schamel, Mark ; Jara, Ana Cc: Elizabeth Young Subject: FW: DARPA

Mark and Ana-

Following up on my chat with Mark a moment ago, DARPA's general counsel forwarded this response to Georgia Tech (see below). Based on the response, Georgia Tech can give authorization for Manos to release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena. My understanding is that Manos does not have any classified documents; however, if there are any classified documents, follow up with Mr. Darin Smith (as instructed below) before any exchange with DOJ.

If there are any questions or concerns, please feel free to reach out.

Thanks,

Christian Fuller Senior Counsel, Employment & Litigation Georgia Institute of Technology Phone: 404-403-8204 <u>christian.fuller@legal.gatech.edu</u>

From: Lopes, Crane <<u>Crane.Lopes@darpa.mil</u>>
Sent: Tuesday, July 20, 2021 2:16 PM
To: DeFilippis, Andrew (USANYS) <<u>Andrew.DeFilippis@usdoj.gov</u>>; Elizabeth Young <<u>EYoung@LAW.GA.GOV</u>>
Cc: Fuller, Christian <<u>christian.fuller@legal.gatech.edu</u>>; Wasch, Kate <<u>kate.wasch@legal.gatech.edu</u>>; Nie, Ling-Ling
<<u>liinglingnie@gatech.edu</u>>; Keilty, Michael (USANYE) <<u>Michael.Keilty@usdoj.gov</u>>; Patel, Neeraj (USACT)
<<u>Neeraj.Patel@usdoj.gov</u>>; Scarpelli, Anthony (USADC) <<u>Anthony.Scarpelli@usdoj.gov</u>>; Eckenrode, John (JMD)
<John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <<u>wbaldenberg@fbi.gov</u>>; Maddock, Adam M. (CyD) (FBI)
<<u>ammaddock@fbi.gov</u>>; James, Ryan Joseph (INSD) (FBI) <<u>rijames@fbi.gov</u>>; Bennett, Wes <<u>wes.bennett@darpa.mil</u>>;
Smith, Darin <<u>Darin.Smith@darpa.mil</u>>
Subject: RE: DARPA

Ms. Young:

Thank you for your diligence in protecting DARPA-related records and other documents from unauthorized use or disclosure.

I have discussed this matter with Wes Bennett, the Director of the DARPA Contracts Management Office. Mr. Bennett is info-copied on this message. We request that you cooperate with the Department of Justice (DoJ) by immediately providing them with all DARPA-related unclassfied documents and records in your possession and that are requested by their subpoena.

If DoJ has requested DARPA-related classified documents and records in your possession, release should be coordinated with Mr. Darin Smith, DARPA Security & Intelligence Directorate. Mr. Smith is info-copied on this message.

Please contact me if I can assist you.

Crane Lopes, Ph.D. General Counsel DARPA Off | 571.218.4887 🖸 Mob | 571.239.5084



Creating **BREAKTHROUGH TECHNOLOGIES** For National Security

From: DeFilippis, Andrew (USANYS) <<u>Andrew.DeFilippis@usdoj.gov</u>> Sent: Tuesday, July 20, 2021 10:51 AM To: Elizabeth Young <<u>EYoung@LAW.GA.GOV</u>> Cc: 'Fuller, Christian' <<u>christian.fuller@legal.gatech.edu</u>>; Wasch, Kate <<u>kate.wasch@legal.gatech.edu</u>>; Ling-Ling Nie (<u>linglingnie@gatech.edu</u>) <<u>linglingnie@gatech.edu</u>>; Lopes, Crane <<u>Crane.Lopes@darpa.mil</u>>; Keilty, Michael (USANYE) <<u>Michael.Keilty@usdoj.gov</u>>; Patel, Neeraj (USACT) <<u>Neeraj.Patel@usdoj.gov</u>>; Scarpelli, Anthony (USADC) <<u>Anthony.Scarpelli@usdoj.gov</u>>; Eckenrode, John (JMD) <<u>John.Eckenrode@usdoj.gov</u>>; Aldenberg, William B. (NH) (FBI) <<u>wbaldenberg@fbi.gov</u>>; Maddock, Adam M. (CyD) (FBI) <<u>ammaddock@fbi.gov</u>>; James, Ryan Joseph (INSD) (FBI) <<u>rijames@fbi.gov</u>>

Subject: DARPA

Ms. Young,

Thank you very much for our call earlier today. On that call, you requested that we provide assurance that the Defense Advanced Research Projects Agency (DARPA) has no objection to Georgia Tech's providing documents and other records in response to our federal grand jury subpoena that relate to a contract between Georgia Tech and DARPA. I am copying Crane Lopes, General Counsel of DARPA. Mr. Lopes and DARPA have been fully cooperative with and supportive of our investigative efforts. On a phone call that occurred a few minutes ago, Mr. Lopes has assured me again that DARPA has no objections to Georgia Tech's provision of any records or information (both classified and unclassified) to our team and to the grand jury.

As noted, federal law requires you to provide such records regardless of any potentially applicable contractual restrictions.

Please let me know us you have any questions. We would appreciate if you could also please confirm that you consent to the two Georgia Tech employees we discussed providing responsive records that they have identified. Thank you.

Andrew J. DeFilippis Assistant Special Counsel U.S. Department of Justice (646) 530-0087

This message contains confidential information, intended only for the person(s) named above, which may also be privileged. Any use, distribution, copying or disclosure by any other person is strictly prohibited. In such case, you should delete this message and kindly notify the sender via reply e-mail. Please advise immediately if you or your employer does not consent to Internet e-mail for messages of this kind.

From:	DeFilippis, Andrew (USANYS) <andrew.defilippis@usdoj.gov></andrew.defilippis@usdoj.gov>
Sent:	Tuesday, July 20, 2021 10:51 AM
То:	Elizabeth Young
Cc:	'Fuller, Christian'; Wasch, Kate; Ling-Ling Nie (linglingnie@gatech.edu); Lopes, Crane; Keilty,Michael (USANYE); Patel, Neeraj (USACT); Scarpelli, Anthony (USADC); Eckenrode, John (JMD); Aldenberg, William B.(NH) (FBI); Maddock, Adam M. (CyD) (FBI); James, Ryan Joseph (INSD) (FBI)
Subject:	DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ms. Young,

Thank you very much for our call earlier today. On that call, you requested that we provide assurance that the Defense Advanced Research Projects Agency (DARPA) has no objection to Georgia Tech's providing documents and other records in response to our federal grand jury subpoena that relate to a contract between Georgia Tech and DARPA. I am copying Crane Lopes, General Counsel of DARPA. Mr. Lopes and DARPA have been fully cooperative with and supportive of our investigative efforts. On a phone call that occurred a few minutes ago, Mr. Lopes has assured me again that DARPA has no objections to Georgia Tech's provision of any records or information (both classified and unclassified) to our team and to the grand jury.

As noted, federal law requires you to provide such records regardless of any potentially applicable contractual restrictions.

Please let me know us you have any questions. We would appreciate if you could also please confirm that you consent to the two Georgia Tech employees we discussed providing responsive records that they have identified. Thank you.

Andrew J. DeFilippis Assistant Special Counsel U.S. Department of Justice (646) 530-0087 Subject: Re: Call Tomorrow (Special Counsel Investigation) Dear

Andrew:

We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful.

Best regards,

Jody

Jody R Westby, Esq.

Managing Principal

Global Cyber Legal LLC

+1.202.255.2700

westby@globalcyberlegal.com

>>>> Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Scarpelli,

>>>> Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Patel, Neeraj

>>>> (USACT) <Neeraj.Patel@usdoj.gov>

>>>> Subject: RE: Call Tomorrow (Special Counsel Investigation)

>>>> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

>>>> Jody, It is unfortunate that you are not willing to join a call with Georgia Tech's counsel for purposes of efficiency and to avoid delaying compliance with federal subpoenas. Regardless, can we please speak at 11:30 AM with you and Mark? Beth, would you then be available for a separate call with our team at either 2:30 PM or 3:30 PM?

>>>> -----Original Message-----

>>>> From: Jody R Westby <westby@globalcyberlegal.com>

>>>> Sent: Tuesday, July 20, 2021 11:23 PM

>>>>> To: DeFilippis, Andrew (USANYS) <ADeFilippis@usa.doj.gov>

>>>>> Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch

>>>> <rasch@globalcyberlegal.com>; Fuller, Christian

>>>> <christian.fuller@legal.gatech.edu>; Wasch, Kate

>>>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD)

>>>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI)

>>>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>;

>>>>> Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony

>>>>> (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT)

>>>> <npatel2@usa.doj.gov>

>>>> Subject: Re: Call Tomorrow (Special Counsel Investigation) Dear

>>>> Andrew:

>>>>> We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

>>>>> We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful.

>>>> Best regards, >>>> Jody >>>> Jody R Westby, Esq. >>>> Managing Principal >>>> Global Cyber Legal LLC >>>> +1.202.255.2700 >>>> westby@globalcyberlegal.com >>>>> https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-a >>>> c >>>> 1 >>>> f >>>> 6 >>>> b0176b0-2941286214a1b996&q=1&e=3db575fb-ac73-4426-bd1f-7b6d618c069 >>>>> d & u = http%3A%2F%2Fwww.globalcyberlegal.com%2F >>>>> On Jul 20, 2021, at 10:24 PM, DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> wrote: >>>> Good Evening Counsel for Georgia Tech and Counsel for David Dagon,

From: Sent:	DeFilippis, Andrew (USANYS) <andrew.defilippis@usdoj.gov> Wednesday, July 28, 2021 11:39 AM</andrew.defilippis@usdoj.gov>
То:	Elizabeth Young
Cc:	Fuller, Christian; Wasch, Kate; Eckenrode, John (JMD); Aldenberg, William B. (NH) (FBI); Fuhrman, Tim (JMD); Keilty,Michael (USANYE); Scarpelli, Anthony (USADC); Patel, Neeraj (USACT); Moak, Joyce (JMD); Royce, Jane (JMD); Royce, Jane (USACT)
Subject:	Re: Call Tomorrow (Special Counsel Investigation)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Beth,

Thank you. We will discuss your assertions below. Can you please add Joyce Moak and Jane Royce (copied) to the Kiteworks site? Also, we have been informed that there is an internal chat system at Georgia Tech. Did you search that system for responsive records? If not, please do so. Also, can you assure us that you searched and produced any pertinent Georgia Tech documents in the custody of Angelos Keromytis and other employees or students involved in the DARPA contract? If not, please ensure that you conduct searches to include documents of all relevant persons. As we noted, the categories of documents we provided to you on our call were not an exclusive list and you are obligated to search for documents more broadly to comply with the subpoena.

Thanks.

> On Jul 28, 2021, at 10:59 AM, Elizabeth Young <EYoung@law.ga.gov> wrote:

>

> I am sending you via Kiteworks a link to a folder containing the documents that Georgia Tech is able to produce with regard to the three categories of documents you asked us to search for during our 7/21 phone conference as follows:

> 1. White papers/analytical papers related to Trump/Alfa Bank/Yotaphone: We are providing copies of several white papers and related documents that we received via counsel for Dr. Antonakakis. We are not certain as to the origin and storage history of these documents and therefore cannot provide authentication for these documents as business records of Georgia Tech.

>

> 2. Email communications related to Trump/Alfa Bank/Yotaphone: You asked us to revisit our prior email production to ensure that no responsive communications had been overlooked in our earlier email response. A new search was conducted using the original search terms listed in the earlier subpoena, and added white papers and analytical papers to the request. The search did identify a number of emails that were not included in the initial production, although they appear to be irrelevant and are predominantly junk mail. However, I am providing them to you in order to demonstrate Tech's compliance with your request.

>

> 3. You indicated that there was a "fairly large file of Trump related materials" that had been assembled for production to the office of Special Counsel Robert Muller or the DOJ. We are unable to locate such a file. I have been informed that Dr. Antonakakis has searched his server for such a file and did not find anything meeting that description.

>

> If you would like me to add any additional recipients to the Kiteworks folder, please let me know.

>>>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>;
>>> Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony
>>> (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT)
>>> <npatel2@usa.doj.gov>
>>> Subject: Re: Call Tomorrow (Special Counsel Investigation) Dear
>>> Andrew:
>>> We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech,

and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

>>>> We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful.

>>>> Best regards, >>>> Jody >>>> Jody R Westby, Esq. >>>> Managing Principal >>>> Global Cyber Legal LLC >>>> +1.202.255.2700 >>>> westby@globalcyberlegal.com >>>> https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-ac >>>> https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-ac >>>> f >>>> f >>>> f >>>> 6 >>>> b0176b0-2941286214a1b996&q=1&e=3db575fb-ac73-4426-bd1f-7b6d618c069d >>>> & u = http%3A%2F%2Fwww.globalcyberlegal.com%2F >>>>> On Jul 20, 2021, at 10:24 PM, DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> wrote:

>>>> Good Evening Counsel for Georgia Tech and Counsel for David Dagon, >>>> We hope all is well. Can you please let us know when you are available for a joint call tomorrow -- preferably at

either 11:30 AM, 2:20 PM or 3:30 PM? We would like to discuss your clients' compliance with recently issued federal grand jury subpoenas. It is important that we have this call to ensure timely and comprehensive compliance with the subpoenas. Thanks very much.

>>>> The Special Counsel Team

<John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT) <npatel2@usa.doj.gov> Subject: Re: Call Tomorrow (Special Counsel Investigation)

Dear Andrew:

We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful. Best regards,

Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-ac1f6b0176b0-2941286214a1b996&q=1&e=3db575fb-ac73-4426-bd1f-7b6d618c069d&u=http%3A%2F%2Fwww.globalcyberlegal.com%2F

On Jul 20, 2021, at 10:24 PM, DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> wrote:

Good Evening Counsel for Georgia Tech and Counsel for David Dagon,

We hope all is well. Can you please let us know when you are available for a joint call tomorrow -- preferably at either 11:30 AM, 2:20 PM or 3:30 PM? We would like to discuss your clients' compliance with recently issued federal grand jury subpoenas. It is important that we have this call to ensure timely and comprehensive compliance with the subpoenas. Thanks very much.

The Special Counsel Team

From: Sent:	DeFilippis, Andrew (USANYS) <andrew.defilippis@usdoj.gov> Wednesday, July 21, 2021 7:05 AM</andrew.defilippis@usdoj.gov>
То:	Jody R Westby
Cc:	Elizabeth Young; Mark Rasch; Fuller, Christian; Wasch, Kate; Eckenrode, John (JMD); Aldenberg, William B. (NH) (FBI); Fuhrman, Tim (JMD); Keilty,Michael (USANYE); Scarpelli, Anthony (USADC); Patel, Neeraj (USACT)
Subject:	RE: Call Tomorrow (Special Counsel Investigation)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jody, It is unfortunate that you are not willing to join a call with Georgia Tech's counsel for purposes of efficiency and to avoid delaying compliance with federal subpoenas. Regardless, can we please speak at 11:30 AM with you and Mark? Beth, would you then be available for a separate call with our team at either 2:30 PM or 3:30 PM?

-----Original Message-----

From: Jody R Westby <westby@globalcyberlegal.com>

Sent: Tuesday, July 20, 2021 11:23 PM

To: DeFilippis, Andrew (USANYS) <ADeFilippis@usa.doj.gov>

Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch <rasch@globalcyberlegal.com>; Fuller, Christian <christian.fuller@legal.gatech.edu>; Wasch, Kate <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT) <npatel2@usa.doj.gov> Subject: Re: Call Tomorrow (Special Counsel Investigation)

Dear Andrew:

We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful. Best regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC >>>> <christian.fuller@legal.gatech.edu>; Wasch, Kate >>>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) >>>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) >>>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; >>>> Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Scarpelli, >>>> Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Patel, Neeraj >>>> (USACT) <Neerai.Patel@usdoj.gov> >>>> Subject: RE: Call Tomorrow (Special Counsel Investigation) >>>>> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. >>>> Jody, It is unfortunate that you are not willing to join a call with Georgia Tech's counsel for purposes of efficiency and to avoid delaying compliance with federal subpoenas. Regardless, can we please speak at 11:30 AM with you and Mark? Beth, would you then be available for a separate call with our team at either 2:30 PM or 3:30 PM? >>>> -----Original Message----->>>> From: Jody R Westby <westby@globalcyberlegal.com> >>>> Sent: Tuesday, July 20, 2021 11:23 PM >>>>> To: DeFilippis, Andrew (USANYS) <ADeFilippis@usa.doj.gov> >>>> Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch >>>> <rasch@globalcyberlegal.com>; Fuller, Christian >>>> <christian.fuller@legal.gatech.edu>; Wasch, Kate >>>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) >>>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) >>>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; >>>>> Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony >>>> (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT) >>>> <npatel2@usa.doj.gov> >>>> Subject: Re: Call Tomorrow (Special Counsel Investigation) Dear >>>> Andrew: >>>>> We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them. >>>>> We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful. >>>>> Best regards, >>>> Jody >>>>> Jody R Westby, Esq. >>>> Managing Principal >>>> Global Cyber Legal LLC >>>> +1.202.255.2700 >>>> westby@globalcyberlegal.com >>>>> https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-a >>>> c >>>> 1 >>>> f >>>> 6

>>>>> b0176b0-2941286214a1b996&q=1&e=3db575fb-ac73-4426-bd1f-7b6d618c069

From:	DeFilippis, Andrew (USANYS) <andrew.defilippis@usdoj.gov></andrew.defilippis@usdoj.gov>
Sent:	Tuesday, July 20, 2021 4:40 PM
То:	Elizabeth Young
Cc:	Lopes, Crane; Fuller, Christian; Wasch, Kate; Ling-Ling Nie (linglingnie@gatech.edu); Keilty, Michael (USANYE); Patel, Neeraj (USACT); Scarpelli, Anthony (USADC); Eckenrode, John (JMD); Aldenberg, William B. (NH) (FBI); Maddock, Adam M.(CyD) (FBI); James, Ryan Joseph (INSD) (FBI); Bennett, Wes; Smith, Darin
Subject:	Re: DARPA
Attachments:	image002.jpg; image004.png; image005.png; image007.jpg

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks very much, all. We greatly appreciate your quick responses. Ms. Young, we will be in touch once we have received and reviewed the documents and can discuss any further records searches at that time.

Thanks again.

On Jul 20, 2021, at 4:11 PM, Elizabeth Young wrote:

Mr. Lopes,

Thank you for confirming that Georgia Tech may produce documents responsive to the DOJ's subpoena without running afoul of any obligations it may have to DARPA/DOD to safeguard confidential or classified information. Georgia Tech therefore is authorizing the release of responsive materials that have been identified by the employees involved directly to the DOJ.

It is our understanding from conversations with the employees' counsel that the documents that are about to be produced do not contain any classified information. To the extent that the DOJ might seek production of additional documents from Georgia Tech in the future, we will take appropriate steps to determine whether any responsive documents are classified and, if so, will coordinate with Mr. Smith regarding production.

Mr. DeFilippis, if you require anything further from Georgia Tech in order to fulfill its obligations under the subpoena beyond the above statement affirming that Tech is authorizing release of the records that have been compiled by the employees, please let me know.

Sincerely,

Beth Young

Beth Young Assistant Attorney General Office of the Attorney General Chris Carr Government Services & Employment (404) 458-3425 eyoung@law.ga.gov Georgia Department of Law From: Lopes, Crane

Sent: Tuesday, July 20, 2021 2:16 PM

To: DeFilippis, Andrew (USANYS) ; Elizabeth Young

Cc: 'Fuller, Christian' ; Wasch, Kate ; Ling-Ling Nie (linglingnie@gatech.edu) ; Keilty, Michael (USANYE) ; Patel, Neeraj (USACT) ; Scarpelli, Anthony (USADC) ; Eckenrode, John (JMD) ; Aldenberg, William B. (NH) (FBI) ; Maddock, Adam M. (CyD) (FBI) ; James, Ryan Joseph (INSD) (FBI) ; Bennett, Wes ; Smith, Darin **Subject:** RE: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ms. Young:

Thank you for your diligence in protecting DARPA-related records and other documents from unauthorized use or disclosure.

I have discussed this matter with Wes Bennett, the Director of the DARPA Contracts Management Office. Mr. Bennett is info-copied on this message. We request that you cooperate with the Department of Justice (DoJ) by immediately providing them with all DARPA-related unclassfied documents and records in your possession and that are requested by their subpoena.

If DoJ has requested DARPA-related classified documents and records in your possession, release should be coordinated with Mr. Darin Smith, DARPA Security & Intelligence Directorate. Mr. Smith is infocopied on this message.

Please contact me if I can assist you.

Crane Lopes, Ph.D.

General Counsel

DARPA

Off | 571.218.4887 🕰

Mob | 571.239.5084

Creating BREAKTHROUGH TECHNOLOGIES

For National Security

From: DeFilippis, Andrew (USANYS) <<u>Andrew.DeFilippis@usdoj.gov</u>>

Sent: Tuesday, July 20, 2021 10:51 AM

To: Elizabeth Young <<u>EYoung@LAW.GA.GOV</u>>

Cc: 'Fuller, Christian' <<u>christian.fuller@legal.gatech.edu</u>>; Wasch, Kate <<u>kate.wasch@legal.gatech.edu</u>>; Ling-Ling Nie (<u>linglingnie@gatech.edu</u>) <<u>linglingnie@gatech.edu</u>>; Lopes, Crane

<<u>Crane.Lopes@darpa.mil</u>>; Keilty, Michael (USANYE) <<u>Michael.Keilty@usdoj.gov</u>>; Patel, Neeraj (USACT) <<u>Neeraj.Patel@usdoj.gov</u>>; Scarpelli, Anthony (USADC) <<u>Anthony.Scarpelli@usdoj.gov</u>>; Eckenrode, John (JMD) <<u>John.Eckenrode@usdoj.gov</u>>; Aldenberg, William B. (NH) (FBI) <<u>wbaldenberg@fbi.gov</u>>; Maddock, Adam M. (CyD) (FBI) <<u>ammaddock@fbi.gov</u>>; James, Ryan Joseph (INSD) (FBI) <rijames@fbi.gov>

Subject: DARPA

Ms. Young,

Thank you very much for our call earlier today. On that call, you requested that we provide assurance that the Defense Advanced Research Projects Agency (DARPA) has no objection to Georgia Tech's providing documents and other records in response to our federal grand jury subpoena that relate to a contract between Georgia Tech and DARPA. I am copying Crane Lopes, General Counsel of DARPA. Mr. Lopes and DARPA have been fully cooperative with and supportive of our investigative efforts. On a phone call that occurred a few minutes ago, Mr. Lopes has assured me again that DARPA has no

>>>> Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch >>>> <rasch@globalcyberlegal.com>; Fuller, Christian >>>> <christian.fuller@legal.gatech.edu>; Wasch, Kate >>>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) >>>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) >>>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; >>>> Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Scarpelli, >>>> Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Patel, Neeraj >>>> (USACT) <Neeraj.Patel@usdoj.gov> >>>> Subject: RE: Call Tomorrow (Special Counsel Investigation) >>>> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. >>>> Jody, It is unfortunate that you are not willing to join a call with Georgia Tech's counsel for purposes of efficiency and to avoid delaying compliance with federal subpoenas. Regardless, can we please speak at 11:30 AM with you and Mark? Beth, would you then be available for a separate call with our team at either 2:30 PM or 3:30 PM? >>>> -----Original Message----->>>> From: Jody R Westby <westby@globalcyberlegal.com> >>>> Sent: Tuesday, July 20, 2021 11:23 PM >>>> To: DeFilippis, Andrew (USANYS) <ADeFilippis@usa.doj.gov> >>>> Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch >>>> <rasch@globalcyberlegal.com>; Fuller, Christian >>>> <christian.fuller@legal.gatech.edu>; Wasch, Kate >>>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) >>>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) >>>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; >>>> Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony >>>> (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT) >>>> <npatel2@usa.doj.gov> >>>> Subject: Re: Call Tomorrow (Special Counsel Investigation) Dear >>>> Andrew: >>>> We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them. >>>> We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful. >>>> Best regards, >>>> Jody >>>> Jody R Westby, Esq. >>>> Managing Principal >>>> Global Cyber Legal LLC >>> +1.202.255.2700 >>>> westby@globalcyberlegal.com >>>> https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-ac >>>> 1 >>>> f >>>> 6

>>>> ----- Original Message----->>>> From: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> >>>> Sent: Wednesday, July 21, 2021 7:05 AM >>>> To: Jody R Westby <westby@globalcyberlegal.com> >>>> Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch >>>> <rasch@globalcyberlegal.com>; Fuller, Christian >>>> <christian.fuller@legal.gatech.edu>; Wasch, Kate >>>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) >>>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) >>>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; >>>> Keilty, Michael (USANYE) < Michael.Keilty@usdoj.gov>; Scarpelli, >>>> Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Patel, Neeraj >>>> (USACT) <Neeraj.Patel@usdoj.gov> >>>> Subject: RE: Call Tomorrow (Special Counsel Investigation) >>>> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. >>>> Jody, It is unfortunate that you are not willing to join a call with Georgia Tech's counsel for purposes of efficiency and to avoid delaying compliance with federal subpoenas. Regardless, can we please speak at 11:30 AM with you and Mark? Beth, would you then be available for a separate call with our team at either 2:30 PM or 3:30 PM? >>>> -----Original Message----->>>> From: Jody R Westby <westby@globalcyberlegal.com> >>>> Sent: Tuesday, July 20, 2021 11:23 PM >>>> To: DeFilippis, Andrew (USANYS) <ADeFilippis@usa.doj.gov> >>>> Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch >>>> <rasch@globalcyberlegal.com>; Fuller, Christian >>>> <christian.fuller@legal.gatech.edu>; Wasch, Kate >>>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) >>>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) >>>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; >>>> Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony >>>> (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT) >>>> <npatel2@usa.doj.gov> >>>> Subject: Re: Call Tomorrow (Special Counsel Investigation) Dear >>>> Andrew: >>>> We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us

to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

>>>> We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful.

>>>> Best regards,
>>> Jody
>>>> Jody R Westby, Esq.
>>>> Managing Principal
>>>> Global Cyber Legal LLC
>>> +1.202.255.2700
>>> westby@globalcyberlegal.com

>>> -----Original Message----->>> From: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> >>> Sent: Wednesday, July 21, 2021 7:05 AM >>> To: Jody R Westby <westby@globalcyberlegal.com> >>> Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch >>> <rasch@globalcyberlegal.com>; Fuller, Christian >>> <christian.fuller@legal.gatech.edu>; Wasch, Kate >>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) >>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) >>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; >>> Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Scarpelli, >>> Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Patel, Neeraj (USACT) >>> <Neeraj.Patel@usdoj.gov> >>> Subject: RE: Call Tomorrow (Special Counsel Investigation) >>> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. >>> Jody, It is unfortunate that you are not willing to join a call with Georgia Tech's counsel for purposes of efficiency and to avoid delaying compliance with federal subpoenas. Regardless, can we please speak at 11:30 AM with you and Mark? Beth, would you then be available for a separate call with our team at either 2:30 PM or 3:30 PM? >>> -----Original Message----->>> From: Jody R Westby <westby@globalcyberlegal.com> >>> Sent: Tuesday, July 20, 2021 11:23 PM >>> To: DeFilippis, Andrew (USANYS) <ADeFilippis@usa.doj.gov> >>> Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch >>> <rasch@globalcyberlegal.com>; Fuller, Christian >>> <christian.fuller@legal.gatech.edu>; Wasch, Kate >>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) >>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) >>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; >>> Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony >>> (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT) >>> <npatel2@usa.doj.gov> >>> Subject: Re: Call Tomorrow (Special Counsel Investigation) Dear >>> Andrew: >>> We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not

a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

>>> We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful.

>>> Best regards, >>> Jody >>> Jody R Westby, Esq. >>> Managing Principal >>> Global Cyber Legal LLC >>> +1.202.255.2700 >>> westby@globalcyberlegal.com >> Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Scarpelli,

>> Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Patel, Neeraj (USACT)

>> <Neeraj.Patel@usdoj.gov>

>> Subject: RE: Call Tomorrow (Special Counsel Investigation)

>> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

>> Jody, It is unfortunate that you are not willing to join a call with Georgia Tech's counsel for purposes of efficiency and to avoid delaying compliance with federal subpoenas. Regardless, can we please speak at 11:30 AM with you and Mark? Beth, would you then be available for a separate call with our team at either 2:30 PM or 3:30 PM?

>> -----Original Message-----

>> From: Jody R Westby <westby@globalcyberlegal.com>

>> Sent: Tuesday, July 20, 2021 11:23 PM

>> To: DeFilippis, Andrew (USANYS) <ADeFilippis@usa.doj.gov>

>> Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch

>> <rasch@globalcyberlegal.com>; Fuller, Christian

>> <christian.fuller@legal.gatech.edu>; Wasch, Kate

>> <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD)

>> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI)

>> <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>;

>> Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony

>> (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT)

>> <npatel2@usa.doj.gov>

>> Subject: Re: Call Tomorrow (Special Counsel Investigation) Dear

>> Andrew:

>> We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

>> We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful.

>> Best regards,

>> Jody

>> Jody R Westby, Esq.

>> Managing Principal

>> Global Cyber Legal LLC

>> +1.202.255.2700

>> westby@globalcyberlegal.com

>> https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-ac1f

>> 6

>> b0176b0-2941286214a1b996&q = 1&e = 3db575fb-ac73-4426-bd1f-7b6d618c069d&u

>> = http%3A%2F%2Fwww.globalcyberlegal.com%2F

>> On Jul 20, 2021, at 10:24 PM, DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> wrote:

>> Good Evening Counsel for Georgia Tech and Counsel for David Dagon,

>> We hope all is well. Can you please let us know when you are available for a joint call tomorrow -- preferably at either 11:30 AM, 2:20 PM or 3:30 PM? We would like to discuss your clients' compliance with recently issued federal grand jury subpoenas. It is important that we have this call to ensure timely and comprehensive compliance with the subpoenas. Thanks very much.

From: Sent: To: Cc:	Elizabeth Young <eyoung@law.ga.gov> Tuesday, July 20, 2021 4:11 PM 'Lopes, Crane'; DeFilippis, Andrew (USANYS) 'Fuller, Christian'; Wasch, Kate; Ling-Ling Nie (linglingnie@gatech.edu); Keilty, Michael (USANYE); Patel, Neeraj (USACT); Scarpelli, Anthony (USADC); Eckenrode, John (JMD); Aldenberg, William B. (NH) (FBI); Maddock, Adam M. (CyD) (FBI); James, Ryan Joseph</eyoung@law.ga.gov>
Subject:	(INSD) (FBI); Bennett, Wes; Smith, Darin RE: DARPA

Mr. Lopes,

Thank you for confirming that Georgia Tech may produce documents responsive to the DOJ's subpoena without running afoul of any obligations it may have to DARPA/DOD to safeguard confidential or classified information. Georgia Tech therefore is authorizing the release of responsive materials that have been identified by the employees involved directly to the DOJ.

It is our understanding from conversations with the employees' counsel that the documents that are about to be produced do not contain any classified information. To the extent that the DOJ might seek production of additional documents from Georgia Tech in the future, we will take appropriate steps to determine whether any responsive documents are classified and, if so, will coordinate with Mr. Smith regarding production.

Mr. DeFilippis, if you require anything further from Georgia Tech in order to fulfill its obligations under the subpoena beyond the above statement affirming that Tech is authorizing release of the records that have been compiled by the employees, please let me know.

Sincerely,

Beth Young



Beth Young Assistant Attorney General Office of the Attorney General Chris Carr Government Services & Employment (404) 458-3425 eyoung@law.ga.gov Georgia Department of Law 40 Capitol Square SW Atlanta, Georgia 30334

From: Lopes, Crane
Sent: Tuesday, July 20, 2021 2:16 PM
To: DeFilippis, Andrew (USANYS) ; Elizabeth Young
Cc: 'Fuller, Christian' ; Wasch, Kate ; Ling-Ling Nie (linglingnie@gatech.edu) ; Keilty, Michael (USANYE) ; Patel, Neeraj (USACT) ; Scarpelli, Anthony (USADC) ; Eckenrode, John (JMD) ; Aldenberg, William B. (NH) (FBI) ; Maddock, Adam M. (CyD) (FBI) ; James, Ryan Joseph (INSD) (FBI) ; Bennett, Wes ; Smith, Darin
Subject: RE: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ms. Young:

Thank you for your diligence in protecting DARPA-related records and other documents from unauthorized use or disclosure.

I have discussed this matter with Wes Bennett, the Director of the DARPA Contracts Management Office. Mr. Bennett is info-copied on this message. We request that you cooperate with the Department of Justice (DoJ) by immediately providing them with all DARPA-related unclassfied documents and records in your possession and that are requested by their subpoena.

If DoJ has requested DARPA-related classified documents and records in your possession, release should be coordinated with Mr. Darin Smith, DARPA Security & Intelligence Directorate. Mr. Smith is info-copied on this message.

Please contact me if I can assist you.

Crane Lopes, Ph.D. General Counsel DARPA Off | 571.218.4887 🕮 Mob | 571.239.5084



Creating **BREAKTHROUGH TECHNOLOGIES** For National Security

From: DeFilippis, Andrew (USANYS) <<u>Andrew.DeFilippis@usdoj.gov</u>>

Sent: Tuesday, July 20, 2021 10:51 AM

To: Elizabeth Young < <a>EYoung@LAW.GA.GOV>

Cc: 'Fuller, Christian' <<u>christian.fuller@legal.gatech.edu</u>>; Wasch, Kate <<u>kate.wasch@legal.gatech.edu</u>>; Ling-Ling Nie (<u>linglingnie@gatech.edu</u>) <<u>linglingnie@gatech.edu</u>>; Lopes, Crane <<u>Crane.Lopes@darpa.mil</u>>; Keilty, Michael (USANYE) <<u>Michael.Keilty@usdoj.gov</u>>; Patel, Neeraj (USACT) <<u>Neeraj.Patel@usdoj.gov</u>>; Scarpelli, Anthony (USADC) <<u>Anthony.Scarpelli@usdoj.gov</u>>; Eckenrode, John (JMD) <<u>John.Eckenrode@usdoj.gov</u>>; Aldenberg, William B. (NH) (FBI) <<u>wbaldenberg@fbi.gov</u>>; Maddock, Adam M. (CyD) (FBI) <<u>ammaddock@fbi.gov</u>>; James, Ryan Joseph (INSD) (FBI) <<u>rijames@fbi.gov</u>>

Subject: DARPA

Ms. Young,

Thank you very much for our call earlier today. On that call, you requested that we provide assurance that the Defense Advanced Research Projects Agency (DARPA) has no objection to Georgia Tech's providing documents and other records in response to our federal grand jury subpoena that relate to a contract between Georgia Tech and DARPA. I am copying Crane Lopes, General Counsel of DARPA. Mr. Lopes and DARPA have been fully cooperative with and supportive of our investigative efforts. On a phone call that occurred a few minutes ago, Mr. Lopes has assured me again that DARPA has

From:	Elizabeth Young <eyoung@law.ga.gov></eyoung@law.ga.gov>
Sent:	Wednesday, July 21, 2021 4:42 PM
То:	'Jody R Westby'
Cc:	christian.fuller@legal.gatech.edu; Mark Rasch; Mark Rasch
Subject:	RE: DARPA
Attachments:	Georgia-Tech-Subpoena-July-14-2021 (002).pdf

Jody and Mark,

Attached please find a copy of the Special Counsel's most recent subpoena to Georgia Tech. Please note that the cover letter contains a strongly worded request not to disclose the subpoena (or Tech's compliance therewith), but I expressly confirmed with Special Counsel on our call today that this was not intended to prohibit Tech from sharing the subpoena with you and your client.

We have been given some instructions of where to begin looking for responsive documents and will begin by working with Dr. Antonakokis and other Tech employees to find responsive documents. I presume that as we go along we may end up needing your client's help finding the location of certain documents, and I'll reach out to you when/if that happens.

Beth Young Assistant Attorney General Office of the Attorney General Chris Carr Government Services & Employment (404) 458-3425 eyoung@law.ga.gov Georgia Department of Law 40 Capitol Square SW Atlanta, Georgia 30334

-----Original Message-----From: Jody R Westby <westby@globalcyberlegal.com> Sent: Wednesday, July 21, 2021 10:39 AM To: Elizabeth Young <EYoung@LAW.GA.GOV> Cc: christian.fuller@legal.gatech.edu; Mark Rasch <rasch@globalcyberlegal.com>; Mark Rasch < Subject: Re: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Elizabeth,

Thank you for your note. Georgia Tech needs to work out its production with the Special Counsel and if they need assistance, let us know. We are happy to assist, if necessary. We are available for a call between noon and 2:30 p.m. (have hard stop at 2:30 or after 4:00 p.m. Thank you,

Cc: Elizabeth Young <EYoung@LAW.GA.GOV> Subject: Fwd: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Christian,

My apologies, my email auto-filled the name on the note below to a friend who works at Aon. I have contacted him and asked him to ignore and delete the note and confirm. Please see note below that was meant for you. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

Begin forwarded message:

From: Jody R Westby <westby@globalcyberlegal.com> Subject: DARPA Date: July 20, 2021 at 6:22:14 PM EDT To: Christian Hoffman <christian.hoffman@aon.com> Cc: eyoung@law.ga.gov, Mark Rasch <rasch@globalcyberlegal.com>, Mark Rasch <

Dear Christian,

Thank you for your call today and forwarding the communications below. Please be advised that, despite your authorization, Mr. Dagon will not provide to the Special Counsel or "release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena." Global Cyber Legal and Mr. Dagon will not be responsible for Georgia Tech's response to these criminal grand jury subpoenas; Georgia Tech is solely responsible for responding to these subpoenas.

We have never seen the first subpoena Georgia Tech produced or your production; nor have we seen this second subpoena. Although Georgia Tech agreed to an informal joint defense agreement, after we produced our subpoena and relevant documents, Georgia Tech pulled back from that and refused to share any information, including providing a copy of the relevant DARPA contract (Kate provided the wrong one earlier but refused to provide the Enhanced Attribution contract). We are also not privy to your discussions with the Special Counsel office. I am sure you can understand that this puts us in an untenable position. If you need any assistance from Mr. Dagon, please let us know. Kind regards,

Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com ------ Forwarded message ------From: Fuller, Christian <christian.fuller@legal.gatech.edu> Date: Tue, Jul 20, 2021 at 3:18 PM Subject: RE: DARPA To:

Cc: Elizabeth Young <EYoung@law.ga.gov>

Jody-

DARPA's general counsel forwarded this response to Georgia Tech (see below). Based on the response, Georgia Tech can give authorization for David to release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena. My understanding is that David does not have any classified documents; however, if there are any classified documents, follow up with Mr. Darin Smith (as instructed below) before any exchange with DOJ.

If there are any questions or concerns, please feel free to reach out.

Thanks,

Christian Fuller Senior Counsel, Employment & Litigation Georgia Institute of Technology Phone: 404-403-8204 christian.fuller@legal.gatech.edu

From: Lopes, Crane < Crane.Lopes@darpa.mil>

Sent: Tuesday, July 20, 2021 2:16 PM

To: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov>; Elizabeth Young <EYoung@LAW.GA.GOV> Cc: Fuller, Christian <christian.fuller@legal.gatech.edu>; Wasch, Kate <kate.wasch@legal.gatech.edu>; Nie, Ling-Ling <linglingnie@gatech.edu>; Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Patel, Neeraj (USACT) <Neeraj.Patel@usdoj.gov>; Scarpelli, Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Maddock, Adam M. (CyD) (FBI) <ammaddock@fbi.gov>; James, Ryan Joseph (INSD) (FBI) <rjjames@fbi.gov>; Bennett, Wes <wes.bennett@darpa.mil>; Smith, Darin <Darin.Smith@darpa.mil> Subject: RE: DARPA

Ms. Young:

Thank you for your diligence in protecting DARPA-related records and other documents from unauthorized use or disclosure.

I have discussed this matter with Wes Bennett, the Director of the DARPA Contracts Management Office. Mr. Bennett is info-copied on this message. We request that you cooperate with the Department of Justice (DoJ) by immediately providing them with all DARPA-related unclassfied documents and records in your possession and that are requested by their subpoena.

If DoJ has requested DARPA-related classified documents and records in your possession, release should be coordinated with Mr. Darin Smith, DARPA Security & Intelligence Directorate. Mr. Smith is info-copied on this message.

Please contact me if I can assist you.

Crane Lopes, Ph.D. General Counsel DARPA Off | 571.218.4887 🕿 Mob | 571.239.5084

<image004.jpg>Creating BREAKTHROUGH TECHNOLOGIES For National Security

From: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> Sent: Tuesday, July 20, 2021 10:51 AM

To: Elizabeth Young <EYoung@LAW.GA.GOV>

Cc: 'Fuller, Christian' <christian.fuller@legal.gatech.edu>; Wasch, Kate <kate.wasch@legal.gatech.edu>; Ling-Ling Nie (linglingnie@gatech.edu) <linglingnie@gatech.edu>; Lopes, Crane <Crane.Lopes@darpa.mil>; Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Patel, Neeraj (USACT) <Neeraj.Patel@usdoj.gov>; Scarpelli, Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Maddock, Adam M. (CyD) (FBI) <ammaddock@fbi.gov>; James, Ryan Joseph (INSD) (FBI) <rjjames@fbi.gov> Subject: DARPA

Ms. Young,

Thank you very much for our call earlier today. On that call, you requested that we provide assurance that the Defense Advanced Research Projects Agency (DARPA) has no objection to Georgia Tech's providing documents and other records in response to our federal grand jury subpoena that relate to a contract between Georgia Tech and DARPA. I am copying Crane Lopes, General Counsel of DARPA. Mr. Lopes and DARPA have been fully cooperative with and supportive of our investigative efforts. On a phone call that occurred a few minutes ago, Mr. Lopes has assured me again that DARPA has no objections to Georgia Tech's provision of any records or information (both classified and unclassified) to our team and to the grand jury.

As noted, federal law requires you to provide such records regardless of any potentially applicable contractual restrictions.

Please let me know us you have any questions. We would appreciate if you could also please confirm that you consent to the two Georgia Tech employees we discussed providing responsive records that they have identified. Thank you.

Andrew J. DeFilippis Assistant Special Counsel U.S. Department of Justice (646) 530-0087 <image005.jpg>

ATTACHMENT

(Grand Jury Subpoena to Georgia Institute of Technology/Georgia Tech Research Institute/Georgia Tech Research Corporations dated July 14, 2021)

(A) For the period <u>from January 1, 2016 to the pesent</u>, provide all documents, records, communications, and information that (i) are maintained on or within any Georgia Institute of Technology/Georgia Research Institute/Georgia Tech Research Corporation systems, facilities, or properties, (ii) are accessible by or within the possession, custody, control, of David Dagon <u>AND</u> (iii) concern, involve, relate to, or reflect:

(1) allegations (including supporting data) of a purported secret communications channel between the Trump Organization, Spectrum Health, and the Russian Bank Alfa Bank;

(2) allegations (including supporting data) of the purported presence or use of Russian-made Yotaphones by or in the vicinity of Donald Trump or individuals affiliated with Donald Trump;

(B) For the period January 1, 2016 to the present, all documents, records, and information reflecting to work, communications, or activities (including work, communications, or activities conducted under or pursuant to contracts with the Defense Advanced Research Projects Agency, *i.e.*, DARPA) conducted at or by the Georgia Institute of Technology, Georgia Tech Research Institute, and/or Georgia Tech Research Corporations relating to or involving the subject matters set forth in Items (A)(1) and (A)(2) above. (NOTE: The deadline for production of records pursuant to <u>Item (B) only</u> is August 2, 2021)

For any privileged records/communications falling within the subject matters set forth in this subpoena, please provide a privilege log by the return date. The privilege log should contain, for each record or communication, the date, time, sender(s), receipient(s), and copied parties of the record/communication; a description of the general subject matter(s) of the record/communication; and the particular privilege being invoked.

You are requested not to disclose the existence of this subpoena or the fact of your compliance with it to anyone. Any such disclosure on your part could impede the investigation being conducted and thereby interfere with the enforcement of the law. If you do intend to disclose to anyone of the existence of this subpoena or your compliance, please notify the government in the first instance.

INSTRUCTIONS FOR PRODUCTION OF RECORDS

I. General:

- a. Records existing as **Electronically Stored Information (ESI)** shall be produced in **non-proprietary electronic form** and shall include text data and image data held:
 - i. In your record retention systems; and/or
 - ii. By your technology, data, or other service provider(s).

From: Sent: To: Cc: Subject: Mark Rasch < Wednesday, July 21, 2021 6:23 PM Elizabeth Young Jody R Westby; christian.fuller@legal.gatech.edu; Mark Rasch Re: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Beth

Just so you understand, the cover letter ALWAYS contains strongly worded warnings not to disclose the contents of a subpoena. That's because Rule 6(e) F. R. Crim. P. expressly says that "no obligation of secrecy may be imposed on a [grand jury] witness". It's common to make the request, but the law says the opposite. Just FYI.

Mark Rasch

From my cell

```
> On Jul 21, 2021, at 4:41 PM, Elizabeth Young <EYoung@law.ga.gov> wrote:
```

>

> Jody and Mark,

>

> Attached please find a copy of the Special Counsel's most recent subpoena to Georgia Tech. Please note that the cover letter contains a strongly worded request not to disclose the subpoena (or Tech's compliance therewith), but I expressly confirmed with Special Counsel on our call today that this was not intended to prohibit Tech from sharing the subpoena with you and your client.

>

> We have been given some instructions of where to begin looking for responsive documents and will begin by working with Dr. Antonakokis and other Tech employees to find responsive documents. I presume that as we go along we may end up needing your client's help finding the location of certain documents, and I'll reach out to you when/if that happens.

>

>

- > Beth Young
- > Assistant Attorney General
- > Office of the Attorney General Chris Carr Government Services &
- > Employment
- > (404) 458-3425
- > eyoung@law.ga.gov
- > Georgia Department of Law
- > 40 Capitol Square SW
- > Atlanta, Georgia 30334
- >
- >
- >

>

> ----- Original Message-----

> From: Jody R Westby <westby@globalcyberlegal.com>

> Sent: Wednesday, July 21, 2021 10:39 AM

> To: Elizabeth Young <EYoung@LAW.GA.GOV>

> Cc: christian.fuller@legal.gatech.edu; Mark Rasch

> <rasch@globalcyberlegal.com>; Mark Rasch <</pre>

> Subject: Re: DARPA

>

> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

>

>

> Dear Elizabeth,

> Thank you for your note. Georgia Tech needs to work out its production with the Special Counsel and if they need assistance, let us know. We are happy to assist, if necessary. We are available for a call between noon and 2:30 p.m. (have hard stop at 2:30 or after 4:00 p.m.

> Thank you,

> Jody

>

> Jody R Westby, Esq.

> Managing Principal

> Global Cyber Legal LLC

> +1.202.255.2700

> westby@globalcyberlegal.com

> www.globalcyberlegal.com

>

>

>

> On Jul 21, 2021, at 8:00 AM, Elizabeth Young <EYoung@LAW.GA.GOV> wrote:

>

> Ms. Wesby,

>

> It seems I may have inadvertently created a misunderstanding in my correspondence with Special Counsel's office, especially by my references to "employees" that may have appeared to include your client. Georgia Tech had received a request to authorize the release of documents, and at the time I thought that request had come jointly from your client and Dr. Antonakasis. I'm now aware that this was incorrect and apologize for the confusion. I have only been involved in this matter for a few days and while I'm doing my best to get acclimated, there has been a lot to process in a very short time.

>

> I did not mean to suggest that Georgia Tech was directing your client to produce anything directly to the Special Counsel's office or to take on any obligations that rightfully belong to Georgia Tech. And it is certainly not Georgia Tech's intent to place your client in an untenable position. To the extent that my imprecise language may have suggested otherwise, please accept my apologies.

>

> Would you be available for a quick call sometime today so that I can get better acquainted and discuss how to manage any issues that might need your client's logistical assistance in terms of things such as locating where responsive documents/files might be stored on Georgia Tech computers or servers? I'd be happy to give you a call at your convenience.

>

> Best regards,

> Beth Young

>

- > <image001.jpg>
- > <image002.png>
- > <image003.png>
- > Elizabeth (Beth) Young
- > Assistant Attorney General
- > Office of the Attorney General Chris Carr Government Services &
- > Employment
- > (404) 458-3425
- > eyoung@law.ga.gov
- > Georgia Department of Law
- > 40 Capitol Square SW
- > Atlanta, Georgia 30334
- >
- >

>

- > From: Jody R Westby <westby@globalcyberlegal.com>
- > Sent: Tuesday, July 20, 2021 7:01 PM
- > To: christian.fuller@legal.gatech.edu
- > Cc: Elizabeth Young < EYoung@LAW.GA.GOV>
- > Subject: Fwd: DARPA

>

> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

>

> Christian,

> My apologies, my email auto-filled the name on the note below to a friend who works at Aon. I have contacted him and asked him to ignore and delete the note and confirm. Please see note below that was meant for you.

- > Kind regards,
- > Jody

>

- > Jody R Westby, Esq.
- > Managing Principal
- > Global Cyber Legal LLC
- > +1.202.255.2700
- > westby@globalcyberlegal.com
- > www.globalcyberlegal.com
- >
- > Begin forwarded message:
- >
- > From: Jody R Westby <westby@globalcyberlegal.com>
- > Subject: DARPA
- > Date: July 20, 2021 at 6:22:14 PM EDT
- > To: Christian Hoffman <christian.hoffman@aon.com>

>

> Cc: eyoung@law.ga.gov, Mark Rasch <rasch@globalcyberlegal.com>, Mark

> Rasch <

>

> Dear Christian,

> Thank you for your call today and forwarding the communications below. Please be advised that, despite your authorization, Mr. Dagon will not provide to the Special Counsel or "release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena." Global Cyber Legal and Mr. Dagon will not be responsible for Georgia Tech's response to these criminal grand jury subpoenas; Georgia Tech is solely responsible for responding to these subpoenas.

>

> We have never seen the first subpoena Georgia Tech produced or your production; nor have we seen this second subpoena. Although Georgia Tech agreed to an informal joint defense agreement, after we produced our subpoena and relevant documents, Georgia Tech pulled back from that and refused to share any information, including providing a copy of the relevant DARPA contract (Kate provided the wrong one earlier but refused to provide the Enhanced Attribution contract). We are also not privy to your discussions with the Special Counsel office. I am sure you can understand that this puts us in an untenable position. If you need any assistance from Mr. Dagon, please let us know. > Kind regards,

> Jody > > Jody R Westby, Esq. > Managing Principal > Global Cyber Legal LLC > +1.202.255.2700 > westby@globalcyberlegal.com > www.globalcyberlegal.com > > > > ----- Forwarded message ------> From: Fuller, Christian < christian.fuller@legal.gatech.edu> > Date: Tue, Jul 20, 2021 at 3:18 PM > Subject: RE: DARPA > To: > Cc: Elizabeth Young < EYoung@law.ga.gov> > > > Jody— >

> DARPA's general counsel forwarded this response to Georgia Tech (see below). Based on the response, Georgia Tech can give authorization for David to release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena. My understanding is that David does not have any classified documents; however, if there are any classified documents, follow up with Mr. Darin Smith (as instructed below) before any exchange with DOJ.

>

> If there are any questions or concerns, please feel free to reach out.

- >
- > Thanks,
- >
- >
- > Christian Fuller
- > Senior Counsel, Employment & Litigation Georgia Institute of
- > Technology
- > Phone: 404-403-8204
- > christian.fuller@legal.gatech.edu
- >
- >
- > From: Lopes, Crane <Crane.Lopes@darpa.mil>
- > Sent: Tuesday, July 20, 2021 2:16 PM
- > To: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov>;

> Elizabeth Young < EYoung@LAW.GA.GOV>

- > Cc: Fuller, Christian < christian.fuller@legal.gatech.edu>; Wasch, Kate
- > <kate.wasch@legal.gatech.edu>; Nie, Ling-Ling
- > <linglingnie@gatech.edu>; Keilty, Michael (USANYE)
- > <Michael.Keilty@usdoj.gov>; Patel, Neeraj (USACT)
- ><Neeraj.Patel@usdoj.gov>; Scarpelli, Anthony (USADC)
- > <Anthony.Scarpelli@usdoj.gov>; Eckenrode, John (JMD)
- > <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI)
- > <wbaldenberg@fbi.gov>; Maddock, Adam M. (CyD) (FBI)
- > <ammaddock@fbi.gov>; James, Ryan Joseph (INSD) (FBI)
- > <rjjames@fbi.gov>; Bennett, Wes <wes.bennett@darpa.mil>; Smith, Darin
- > <Darin.Smith@darpa.mil>
- > Subject: RE: DARPA
- >

> Ms. Young:

>

> Thank you for your diligence in protecting DARPA-related records and other documents from unauthorized use or disclosure.

>

> I have discussed this matter with Wes Bennett, the Director of the DARPA Contracts Management Office. Mr. Bennett is info-copied on this message. We request that you cooperate with the Department of Justice (DoJ) by immediately providing them with all DARPA-related unclassfied documents and records in your possession and that are requested by their subpoena.

>

>

> If DoJ has requested DARPA-related classified documents and records in your possession, release should be coordinated with Mr. Darin Smith, DARPA Security & Intelligence Directorate. Mr. Smith is info-copied on this message.

> Please contact me if I can assist you.

```
> Crane Lopes, Ph.D.
> General Counsel
> DARPA
> Off
       | 571.218.4887 🕿
> Mob | 571.239.5084
>
> <image004.jpg>Creating BREAKTHROUGH TECHNOLOGIES For National Security
>
>
>
>
>
>
> From: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov>
> Sent: Tuesday, July 20, 2021 10:51 AM
> To: Elizabeth Young < EYoung@LAW.GA.GOV>
> Cc: 'Fuller, Christian' <christian.fuller@legal.gatech.edu>; Wasch,
> Kate <kate.wasch@legal.gatech.edu>; Ling-Ling Nie
> (linglingnie@gatech.edu) < linglingnie@gatech.edu>; Lopes, Crane
> <Crane.Lopes@darpa.mil>; Keilty, Michael (USANYE)
```

- > <Michael.Keilty@usdoj.gov>; Patel, Neeraj (USACT)
- ><Neeraj.Patel@usdoj.gov>; Scarpelli, Anthony (USADC)
- > <Anthony.Scarpelli@usdoj.gov>; Eckenrode, John (JMD)

> <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI)

- > <wbaldenberg@fbi.gov>; Maddock, Adam M. (CyD) (FBI)
- > <ammaddock@fbi.gov>; James, Ryan Joseph (INSD) (FBI) <rjjames@fbi.gov>

> Subject: DARPA

>

> Ms. Young,

>

> Thank you very much for our call earlier today. On that call, you requested that we provide assurance that the Defense Advanced Research Projects Agency (DARPA) has no objection to Georgia Tech's providing documents and other records in response to our federal grand jury subpoena that relate to a contract between Georgia Tech and DARPA. I am copying Crane Lopes, General Counsel of DARPA. Mr. Lopes and DARPA have been fully cooperative with and supportive of our investigative efforts. On a phone call that occurred a few minutes ago, Mr. Lopes has assured me again that DARPA has no objections to Georgia Tech's provision of any records or information (both classified and unclassified) to our team and to the grand jury.

>

> As noted, federal law requires you to provide such records regardless of any potentially applicable contractual restrictions.

>

> Please let me know us you have any questions. We would appreciate if you could also please confirm that you consent to the two Georgia Tech employees we discussed providing responsive records that they have identified. Thank you.

>

- > Andrew J. DeFilippis
- > Assistant Special Counsel
- > U.S. Department of Justice

> (646) 530-0087

<image005.jpg>

>

> <Georgia-Tech-Subpoena-July-14-2021 (002).pdf>

The files documenting when GT received data from Neustar for the Enhanced Attribution contract.

I hope this is helpful. Please let me know if you have questions. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

On Jul 23, 2021, at 3:30 PM, Jody R Westby <<u>westby@globalcyberlegal.com</u>> wrote:

Beth,

At our direction, David made a list of documents/data sources that he thought would be responsive to the subpoena. They are: DARPA whitepapers Whitepaper on DNC attack attribution Analysis of attacks of EOP (Executive Office of the President) networks Whitepaper for DOJ on APT-29 related hackers, crypto coin transactions, and analysis that includes Yotarelated domains "Mueller List" - list of domains and indicators related to APT-28

BLU Phones directory of files

Rhamnousia chat logs

We may have further information after we are able to speak to our client, but not sure when that will be at this point. Hope this is helpful to you. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com search through this data.

There is an additional directory:

/data/whois

holding approximately 6TB of what appears to be the original (raw) whois data from a vendor.

Searches could be run for at least: All Trump owned domains Alfa Bank Spectrum Health Domo.com

Data Transfer Files

The files documenting when GT received data from Neustar for the Enhanced Attribution contract.

I hope this is helpful. Please let me know if you have questions. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

On Jul 23, 2021, at 3:30 PM, Jody R Westby <<u>westby@globalcyberlegal.com</u>> wrote:

Beth,

At our direction, David made a list of documents/data sources that he thought would be responsive to the subpoena. They are: DARPA whitepapers Whitepaper on DNC attack attribution Analysis of attacks of EOP (Executive Office of the President) networks Whitepaper for DOJ on APT-29 related hackers, crypto coin transactions, and analysis that includes Yotarelated domains "Mueller List" - list of domains and indicators related to APT-28

BLU Phones directory of files

Rhamnousia chat logs

We may have further information after we are able to speak to our client, but not sure when that will be at this point. Hope this is helpful to you. Kind regards, Jody

+1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

On Jul 23, 2021, at 3:30 PM, Jody R Westby <westby@globalcyberlegal.com> wrote:

Beth,

At our direction, David made a list of documents/data sources that he thought would be responsive to the subpoena. They are:

DARPA whitepapers

Whitepaper on DNC attack attribution

Analysis of attacks of EOP (Executive Office of the President) networks Whitepaper for DOJ on APT-29 related hackers, crypto coin transactions, and analysis that includes Yota-related domains "Mueller List" - list of domains and indicators related to APT-28

BLU Phones directory of files

Rhamnousia chat logs

We may have further information after we are able to speak to our client, but not sure when that will be at this point. Hope this is helpful to you. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

>> We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful.

>> Best regards,

>> Jody

>> Jody R Westby, Esq.

>> Managing Principal

>> Global Cyber Legal LLC

>> +1.202.255.2700

>> westby@globalcyberlegal.com

>> https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-ac1f6

>> b0176b0-2941286214a1b996&q=1&e=3db575fb-ac73-4426-bd1f-7b6d618c069d&u=

>> http%3A%2F%2Fwww.globalcyberlegal.com%2F

>> On Jul 20, 2021, at 10:24 PM, DeFilippis, Andrew (USANYS) wrote:

>> Good Evening Counsel for Georgia Tech and Counsel for David Dagon,

>> We hope all is well. Can you please let us know when you are available for a joint call tomorrow -preferably at either 11:30 AM, 2:20 PM or 3:30 PM? We would like to discuss your clients' compliance with recently issued federal grand jury subpoenas. It is important that we have this call to ensure timely and comprehensive compliance with the subpoenas. Thanks very much.

>> The Special Counsel Team

From:	Jody R Westby <westby@globalcyberlegal.com></westby@globalcyberlegal.com>
Sent:	Friday, July 23, 2021 3:30 PM
То:	Elizabeth Young
Cc:	Mark Rasch; Mark Rasch
Subject:	List of documents relevant to subpoena

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Beth,

At our direction, David made a list of documents/data sources that he thought would be responsive to the subpoena. They are:

DARPA whitepapers

Whitepaper on DNC attack attribution

Analysis of attacks of EOP (Executive Office of the President) networks

Whitepaper for DOJ on APT-29 related hackers, crypto coin transactions, and analysis that includes Yota-related domains

"Mueller List" - list of domains and indicators related to APT-28

BLU Phones directory of files

Rhamnousia chat logs

We may have further information after we are able to speak to our client, but not sure when that will be at this point. Hope this is helpful to you. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

On Jul 21, 2021, at 7:04 AM, DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> wrote:

Jody, It is unfortunate that you are not willing to join a call with Georgia Tech's counsel for purposes of efficiency and to avoid delaying compliance with federal subpoenas. Regardless, can we please speak at 11:30 AM with you and Mark? Beth, would you then be available for a separate call with our team at either 2:30 PM or 3:30 PM?

-----Original Message-----

- From: Jody R Westby <westby@globalcyberlegal.com>
- Sent: Tuesday, July 20, 2021 11:23 PM
- To: DeFilippis, Andrew (USANYS) <ADeFilippis@usa.doj.gov>

Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch <rasch@globalcyberlegal.com>; Fuller, Christian <christian.fuller@legal.gatech.edu>; Wasch, Kate <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD) <Tim.Fuhrman@usdoj.gov>; Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT) <npatel2@usa.doj.gov> Subject: Re: Call Tomorrow (Special Counsel Investigation)

Dear Andrew:

We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful. Best regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-ac1f6b0176b0-2941286214a1b996&q=1&e=3db575fb-ac73-4426-bd1f-7b6d618c069d&u=http%3A%2F%2Fwww.globalcyberlegal.com%2F <Tim.Fuhrman@usdoj.gov>; Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony (USADC) <AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT) <npatel2@usa.doj.gov> Subject: Re: Call Tomorrow (Special Counsel Investigation)

Dear Andrew:

We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful. Best regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-ac1f6b0176b0-2941286214a1b996&q=1&e=3db575fb-ac73-4426-bd1f-7b6d618c069d&u=http%3A%2F%2Fwww.globalcyberlegal.com%2F

On Jul 20, 2021, at 10:24 PM, DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> wrote:

Good Evening Counsel for Georgia Tech and Counsel for David Dagon,

We hope all is well. Can you please let us know when you are available for a joint call tomorrow -- preferably at either 11:30 AM, 2:20 PM or 3:30 PM? We would like to discuss your clients' compliance with recently issued federal grand jury subpoenas. It is important that we have this call to ensure timely and comprehensive compliance with the subpoenas. Thanks very much.

The Special Counsel Team

From:	Jody R Westby <westby@globalcyberlegal.com></westby@globalcyberlegal.com>
Sent:	Tuesday, July 20, 2021 11:23 PM
То:	DeFilippis, Andrew (USANYS)
Cc:	Elizabeth Young; Mark Rasch; Fuller, Christian; Wasch, Kate; Eckenrode, John (JMD); Aldenberg, William B. (NH) (FBI); Fuhrman, Tim (JMD); Keilty,Michael (USANYE); Scarpelli, Anthony (USADC); Patel, Neeraj (USACT)
Subject:	Re: Call Tomorrow (Special Counsel Investigation)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Andrew:

We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful. Best regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

On Jul 20, 2021, at 10:24 PM, DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> wrote:

Good Evening Counsel for Georgia Tech and Counsel for David Dagon,

We hope all is well. Can you please let us know when you are available for a joint call tomorrow -- preferably at either 11:30 AM, 2:20 PM or 3:30 PM? We would like to discuss your clients' compliance with recently issued federal grand jury subpoenas. It is important that we have this call to ensure timely and comprehensive compliance with the subpoenas. Thanks very much.

The Special Counsel Team

----Original Message----From: Jody R Westby <westby@globalcyberlegal.com>
Sent: Tuesday, July 20, 2021 11:23 PM
To: DeFilippis, Andrew (USANYS) <ADeFilippis@usa.doj.gov>
Cc: Elizabeth Young <EYoung@LAW.GA.GOV>; Mark Rasch <rasch@globalcyberlegal.com>; Fuller, Christian
<christian.fuller@legal.gatech.edu>; Wasch, Kate <kate.wasch@legal.gatech.edu>; Eckenrode, John (JMD)
<John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Fuhrman, Tim (JMD)
<Tim.Fuhrman@usdoj.gov>; Keilty, Michael (USANYE) <MKeilty@usa.doj.gov>; Scarpelli, Anthony (USADC)
<AScarpelli@usa.doj.gov>; Patel, Neeraj (USACT) <npatel2@usa.doj.gov>

Dear Andrew:

We appreciate that you need the documents / data subject to the subpoenas to Georgia Tech. However, we are not a party to those subpoenas and have no knowledge of them. We are not the custodian of records for Georgia Tech, and our client is not the Principal Investigator on the DARPA contract or a professor of the College of Electrical Engineering. We have indicated that we do not believe that Mr. Dagon has any responsive Georgia Tech documents / data in his personal capacity. While our client may be helpful in pointing Georgia Tech to documents or data relevant to their subpoenas (if we are informed of their contents), responsibility for compliance lies with Georgia Tech. We respectfully request that the Special Counsel's team work with each party that it is seeking evidence from and not ask us to get in the middle. Georgia Tech needs to determine how it wants to respond to the subpoenas; we are more than happy to provide any assistance that would be useful to them.

We hope you understand that we are trying to be cooperative. We would be happy to have a call with you and your team separately if that would be helpful. Best regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com https://protect2.fireeye.com/v1/url?k=7211baee-2d8a821e-72169e0b-ac1f6b0176b0-2941286214a1b996&q=1&e=3db575fb-ac73-4426-bd1f-7b6d618c069d&u=http%3A%2F%2Fwww.globalcyberlegal.com%2F

On Jul 20, 2021, at 10:24 PM, DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov> wrote:

Good Evening Counsel for Georgia Tech and Counsel for David Dagon,

We hope all is well. Can you please let us know when you are available for a joint call tomorrow -- preferably at either 11:30 AM, 2:20 PM or 3:30 PM? We would like to discuss your clients' compliance with recently issued federal grand jury subpoenas. It is important that we have this call to ensure timely and comprehensive compliance with the subpoenas. Thanks very much.

The Special Counsel Team

From: Sent: To: Subject: Elizabeth Young <eyoung@law.ga.gov> Wednesday, July 21, 2021 11:00 AM 'Jody R. Westby' RE: DARPA

Works for me. Thanks.

Beth Young Assistant Attorney General Office of the Attorney General Chris Carr Government Services & Employment (404) 458-3425 eyoung@law.ga.gov Georgia Department of Law 40 Capitol Square SW Atlanta, Georgia 30334

-----Original Message-----From: Jody R. Westby <westby@globalcyberlegal.com> Sent: Wednesday, July 21, 2021 10:57 AM To: Elizabeth Young <EYoung@LAW.GA.GOV> Subject: Re: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

That is fine. Thank you. I can send you a zoom link.

Sent from my iPhone Jody Westby, 202.255.2700

On Jul 21, 2021, at 10:52 AM, Elizabeth Young <EYoung@law.ga.gov> wrote:

Thanks; I'll plan to give you a call around 1:00. Look forward to talking with you.

Beth Young Assistant Attorney General Office of the Attorney General Chris Carr Government Services & Employment (404) 458-3425 eyoung@law.ga.gov Georgia Department of Law 40 Capitol Square SW -----Original Message-----From: Jody R Westby <westby@globalcyberlegal.com> Sent: Wednesday, July 21, 2021 10:39 AM To: Elizabeth Young <EYoung@LAW.GA.GOV> Cc: christian.fuller@legal.gatech.edu; Mark Rasch <rasch@globalcyberlegal.com>; Mark Rasch < Subject: Re: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Elizabeth,

Thank you for your note. Georgia Tech needs to work out its production with the Special Counsel and if they need assistance, let us know. We are happy to assist, if necessary. We are available for a call between noon and 2:30 p.m. (have hard stop at 2:30 or after 4:00 p.m. Thank you, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

On Jul 21, 2021, at 8:00 AM, Elizabeth Young <EYoung@LAW.GA.GOV> wrote:

Ms. Wesby,

It seems I may have inadvertently created a misunderstanding in my correspondence with Special Counsel's office, especially by my references to "employees" that may have appeared to include your client. Georgia Tech had received a request to authorize the release of documents, and at the time I thought that request had come jointly from your client and Dr. Antonakasis. I'm now aware that this was incorrect and apologize for the confusion. I have only been involved in this matter for a few days and while I'm doing my best to get acclimated, there has been a lot to process in a very short time.

I did not mean to suggest that Georgia Tech was directing your client to produce anything directly to the Special Counsel's office or to take on any obligations that rightfully belong to Georgia Tech. And it is certainly not Georgia Tech's intent to place your client in an untenable position. To the extent that my imprecise language may have suggested otherwise, please accept my apologies.

Would you be available for a quick call sometime today so that I can get better acquainted and discuss how to manage any issues that might need your client's logistical assistance in terms of things such as locating where responsive documents/files might be stored on Georgia Tech computers or servers? I'd be happy to give you a call at your convenience.

Best regards, Beth Young

<image001.jpg> <image002.png> <image003.png> Elizabeth (Beth) Young Assistant Attorney General Office of the Attorney General Chris Carr Government Services & Employment (404) 458-3425 eyoung@law.ga.gov Georgia Department of Law 40 Capitol Square SW Atlanta, Georgia 30334

From: Jody R Westby <westby@globalcyberlegal.com> Sent: Tuesday, July 20, 2021 7:01 PM To: christian.fuller@legal.gatech.edu Cc: Elizabeth Young <EYoung@LAW.GA.GOV> Subject: Fwd: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Christian,

My apologies, my email auto-filled the name on the note below to a friend who works at Aon. I have contacted him and asked him to ignore and delete the note and confirm. Please see note below that was meant for you. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

Begin forwarded message:

From: Jody R Westby <westby@globalcyberlegal.com> Subject: DARPA Date: July 20, 2021 at 6:22:14 PM EDT To: Christian Hoffman <christian.hoffman@aon.com> Cc: eyoung@law.ga.gov, Mark Rasch <rasch@globalcyberlegal.com>, Mark Rasch <

Dear Christian,

Thank you for your call today and forwarding the communications below. Please be advised that, despite your authorization, Mr. Dagon will not provide to the Special Counsel or "release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena." Global Cyber Legal and Mr.

Dagon will not be responsible for Georgia Tech's response to these criminal grand jury subpoenas; Georgia Tech is solely responsible for responding to these subpoenas.

We have never seen the first subpoena Georgia Tech produced or your production; nor have we seen this second subpoena. Although Georgia Tech agreed to an informal joint defense agreement, after we produced our subpoena and relevant documents, Georgia Tech pulled back from that and refused to share any information, including providing a copy of the relevant DARPA contract (Kate provided the wrong one earlier but refused to provide the Enhanced Attribution contract). We are also not privy to your discussions with the Special Counsel office. I am sure you can understand that this puts us in an untenable position. If you need any assistance from Mr. Dagon, please let us know. Kind regards,

Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

------ Forwarded message ------From: Fuller, Christian <christian.fuller@legal.gatech.edu> Date: Tue, Jul 20, 2021 at 3:18 PM Subject: RE: DARPA To: _______> Cc: Elizabeth Young <EYoung@law.ga.gov>

Jody-

DARPA's general counsel forwarded this response to Georgia Tech (see below). Based on the response, Georgia Tech can give authorization for David to release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena. My understanding is that David does not have any classified documents; however, if there are any classified documents, follow up with Mr. Darin Smith (as instructed below) before any exchange with DOJ.

If there are any questions or concerns, please feel free to reach out.

Thanks,

Christian Fuller Senior Counsel, Employment & Litigation Georgia Institute of Technology Phone: 404-403-8204 christian.fuller@legal.gatech.edu

From: Lopes, Crane <Crane.Lopes@darpa.mil> Sent: Tuesday, July 20, 2021 2:16 PM To: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov>; Elizabeth Young <EYoung@LAW.GA.GOV> Cc: Fuller, Christian <christian.fuller@legal.gatech.edu>; Wasch, Kate <kate.wasch@legal.gatech.edu>; Nie, Ling-Ling <linglingnie@gatech.edu>; Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Patel, Neeraj (USACT) <Neeraj.Patel@usdoj.gov>; Scarpelli, Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Maddock, Adam M. (CyD) (FBI) <ammaddock@fbi.gov>; James, Ryan Joseph (INSD) (FBI) <rjjames@fbi.gov>; Bennett, Wes <wes.bennett@darpa.mil>; Smith, Darin <Darin.Smith@darpa.mil> Subject: RE: DARPA

Ms. Young:

Thank you for your diligence in protecting DARPA-related records and other documents from unauthorized use or disclosure.

I have discussed this matter with Wes Bennett, the Director of the DARPA Contracts Management Office. Mr. Bennett is info-copied on this message. We request that you cooperate with the Department of Justice (DoJ) by immediately providing them with all DARPA-related unclassfied documents and records in your possession and that are requested by their subpoena.

If DoJ has requested DARPA-related classified documents and records in your possession, release should be coordinated with Mr. Darin Smith, DARPA Security & Intelligence Directorate. Mr. Smith is info-copied on this message.

Please contact me if I can assist you.

Crane Lopes, Ph.D. General Counsel DARPA Off | 571.218.4887 🖸 Mob | 571.239.5084

<image004.jpg>Creating BREAKTHROUGH TECHNOLOGIES For National Security

From: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov>

Sent: Tuesday, July 20, 2021 10:51 AM

To: Elizabeth Young < EYoung@LAW.GA.GOV>

Cc: 'Fuller, Christian' <christian.fuller@legal.gatech.edu>; Wasch, Kate <kate.wasch@legal.gatech.edu>; Ling-Ling Nie (linglingnie@gatech.edu) <linglingnie@gatech.edu>; Lopes, Crane <Crane.Lopes@darpa.mil>; Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Patel, Neeraj (USACT) <Neeraj.Patel@usdoj.gov>; Scarpelli, Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Maddock, Adam M. (CyD) (FBI) <ammaddock@fbi.gov>; James, Ryan Joseph (INSD) (FBI) <rjjames@fbi.gov>

Subject: DARPA

Ms. Young,

Thank you very much for our call earlier today. On that call, you requested that we provide assurance that the Defense Advanced Research Projects Agency (DARPA) has no objection to Georgia Tech's providing documents and other records in response to our federal grand jury subpoena that relate to a contract between Georgia Tech and DARPA. I am copying

Crane Lopes, General Counsel of DARPA. Mr. Lopes and DARPA have been fully cooperative with and supportive of our investigative efforts. On a phone call that occurred a few minutes ago, Mr. Lopes has assured me again that DARPA has no objections to Georgia Tech's provision of any records or information (both classified and unclassified) to our team and to the grand jury.

As noted, federal law requires you to provide such records regardless of any potentially applicable contractual restrictions.

Please let me know us you have any questions. We would appreciate if you could also please confirm that you consent to the two Georgia Tech employees we discussed providing responsive records that they have identified. Thank you.

Andrew J. DeFilippis Assistant Special Counsel U.S. Department of Justice (646) 530-0087 <image005.jpg>

From: Sent:	Jody R Westby <westby@globalcyberlegal.com> Wednesday, July 21, 2021 10:39 AM</westby@globalcyberlegal.com>
То:	Elizabeth Young
Cc:	christian.fuller@legal.gatech.edu; Mark Rasch; Mark Rasch
Subject:	Re: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Elizabeth,

Thank you for your note. Georgia Tech needs to work out its production with the Special Counsel and if they need assistance, let us know. We are happy to assist, if necessary. We are available for a call between noon and 2:30 p.m. (have hard stop at 2:30 or after 4:00 p.m. Thank you, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

On Jul 21, 2021, at 8:00 AM, Elizabeth Young <EYoung@LAW.GA.GOV> wrote:

Ms. Wesby,

It seems I may have inadvertently created a misunderstanding in my correspondence with Special Counsel's office, especially by my references to "employees" that may have appeared to include your client. Georgia Tech had received a request to authorize the release of documents, and at the time I thought that request had come jointly from your client and Dr. Antonakasis. I'm now aware that this was incorrect and apologize for the confusion. I have only been involved in this matter for a few days and while I'm doing my best to get acclimated, there has been a lot to process in a very short time.

I did not mean to suggest that Georgia Tech was directing your client to produce anything directly to the Special Counsel's office or to take on any obligations that rightfully belong to Georgia Tech. And it is certainly not Georgia Tech's intent to place your client in an untenable position. To the extent that my imprecise language may have suggested otherwise, please accept my apologies.

Would you be available for a quick call sometime today so that I can get better acquainted and discuss how to manage any issues that might need your client's logistical assistance in terms of things such as locating where responsive documents/files might be stored on Georgia Tech computers or servers? I'd be happy to give you a call at your convenience.

Best regards,

Beth Young

<image001.jpg> <image002.png> <image003.png> Elizabeth (Beth) Young Assistant Attorney General Office of the Attorney General Chris Carr Government Services & Employment (404) 458-3425 eyoung@law.ga.gov Georgia Department of Law 40 Capitol Square SW Atlanta, Georgia 30334

From: Jody R Westby <westby@globalcyberlegal.com> Sent: Tuesday, July 20, 2021 7:01 PM To: christian.fuller@legal.gatech.edu Cc: Elizabeth Young <EYoung@LAW.GA.GOV> Subject: Fwd: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Christian,

My apologies, my email auto-filled the name on the note below to a friend who works at Aon. I have contacted him and asked him to ignore and delete the note and confirm. Please see note below that was meant for you. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

Begin forwarded message:

From: Jody R Westby <westby@globalcyberlegal.com> Subject: DARPA Date: July 20, 2021 at 6:22:14 PM EDT To: Christian Hoffman <christian.hoffman@aon.com> Cc: eyoung@law.ga.gov, Mark Rasch <rasch@globalcyberlegal.com>, Mark Rasch

.com>

Dear Christian,

Thank you for your call today and forwarding the communications below. Please be advised that, despite your authorization, Mr. Dagon will not provide to the Special Counsel or "release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena." Global Cyber Legal and Mr. Dagon will not be responsible for Georgia Tech's response to these criminal grand jury subpoenas; Georgia Tech is solely responsible for responding to these subpoenas.

We have never seen the first subpoena Georgia Tech produced or your production; nor have we seen this second subpoena. Although Georgia Tech agreed to an informal joint defense agreement, after we produced our subpoena and relevant documents, Georgia Tech pulled back from that and refused to share any information, including providing a copy of the relevant DARPA contract (Kate provided the wrong one earlier but refused to provide the Enhanced Attribution contract). We are also not privy to your discussions with the Special Counsel office. I am sure you can understand that this puts us in an untenable position. If you need any assistance from Mr. Dagon, please let us know. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

------ Forwarded message ------From: Fuller, Christian <christian.fuller@legal.gatech.edu> Date: Tue, Jul 20, 2021 at 3:18 PM Subject: RE: DARPA To:

Cc: Elizabeth Young <EYoung@law.ga.gov>

Jody-

DARPA's general counsel forwarded this response to Georgia Tech (see below). Based on the response, Georgia Tech can give authorization for David to release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena. My understanding is that David does not have any classified documents; however, if there are any classified documents, follow up with Mr. Darin Smith (as instructed below) before any exchange with DOJ.

If there are any questions or concerns, please feel free to reach out.

Thanks,

Christian Fuller Senior Counsel, Employment & Litigation Georgia Institute of Technology Phone: 404-403-8204 christian.fuller@legal.gatech.edu

From: Lopes, Crane <Crane.Lopes@darpa.mil> Sent: Tuesday, July 20, 2021 2:16 PM To: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov>; Elizabeth Young <EYoung@LAW.GA.GOV> Cc: Fuller, Christian <christian.fuller@legal.gatech.edu>; Wasch, Kate <kate.wasch@legal.gatech.edu>; Nie, Ling-Ling <linglingnie@gatech.edu>; Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Patel, Neeraj (USACT) <Neeraj.Patel@usdoj.gov>; Scarpelli, Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Maddock, Adam M. (CyD) (FBI) <ammaddock@fbi.gov>; James, Ryan Joseph (INSD) (FBI) <rjjames@fbi.gov>; Bennett, Wes <wes.bennett@darpa.mil>; Smith, Darin <Darin.Smith@darpa.mil> Subject: RE: DARPA

Ms. Young:

Thank you for your diligence in protecting DARPA-related records and other documents from unauthorized use or disclosure.

I have discussed this matter with Wes Bennett, the Director of the DARPA Contracts Management Office. Mr. Bennett is info-copied on this message. We request that you cooperate with the Department of Justice (DoJ) by immediately providing them with all DARPA-related unclassfied documents and records in your possession and that are requested by their subpoena.

If DoJ has requested DARPA-related classified documents and records in your possession, release should be coordinated with Mr. Darin Smith, DARPA Security & Intelligence Directorate. Mr. Smith is info-copied on this message.

Please contact me if I can assist you.

Crane Lopes, Ph.D. General Counsel DARPA Off | 571.218.4887 🖸 Mob | 571.239.5084

<image004.jpg>Creating BREAKTHROUGH TECHNOLOGIES For National Security

From: DeFilippis, Andrew (USANYS) <Andrew.DeFilippis@usdoj.gov>

Sent: Tuesday, July 20, 2021 10:51 AM

To: Elizabeth Young < EYoung@LAW.GA.GOV>

Cc: 'Fuller, Christian' <christian.fuller@legal.gatech.edu>; Wasch, Kate <kate.wasch@legal.gatech.edu>; Ling-Ling Nie (linglingnie@gatech.edu) <linglingnie@gatech.edu>; Lopes, Crane <Crane.Lopes@darpa.mil>; Keilty, Michael (USANYE) <Michael.Keilty@usdoj.gov>; Patel, Neeraj (USACT) <Neeraj.Patel@usdoj.gov>; Scarpelli, Anthony (USADC) <Anthony.Scarpelli@usdoj.gov>; Eckenrode, John (JMD) <John.Eckenrode@usdoj.gov>; Aldenberg, William B. (NH) (FBI) <wbaldenberg@fbi.gov>; Maddock, Adam M. (CyD) (FBI) <ammaddock@fbi.gov>; James, Ryan Joseph (INSD) (FBI) <rijames@fbi.gov> Subject: DARPA

Ms. Young,

Thank you very much for our call earlier today. On that call, you requested that we provide assurance that the Defense Advanced Research Projects Agency (DARPA) has no objection to Georgia Tech's providing documents and other records in response to our federal grand jury subpoena that relate to a contract between Georgia Tech and DARPA. I am copying Crane Lopes, General Counsel of DARPA. Mr. Lopes and DARPA have been fully cooperative with and supportive of our investigative efforts. On a phone call that occurred a few minutes ago, Mr. Lopes has assured me again that DARPA has

From:	MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@LAW.GA.GOV on behalf of Elizabeth Young <eyoung@law.ga.gov></eyoung@law.ga.gov>
Sent:	Wednesday, July 21, 2021 8:00 AM
То:	'Jody R Westby'; christian.fuller@legal.gatech.edu
Subject:	RE: DARPA
Attachments:	RE: DARPA

Sender: EYoung@LAW.GA.GOV Subject: RE: DARPA Message-Id: <f09255fc7f7144d98cfc87ecf1f74e58@LAW.GA.GOV> To: westby@globalcyberlegal.com To: christian.fuller@legal.gatech.edu From: Sent: To: Subject: Elizabeth Young <EYoung@LAW.GA.GOV> Wednesday, July 21, 2021 8:00 AM 'Jody R Westby'; christian.fuller@legal.gatech.edu RE: DARPA

Ms. Wesby,

It seems I may have inadvertently created a misunderstanding in my correspondence with Special Counsel's office, especially by my references to "employees" that may have appeared to include your client. Georgia Tech had received a request to authorize the release of documents, and at the time I thought that request had come jointly from your client and Dr. Antonakasis. I'm now aware that this was incorrect and apologize for the confusion. I have only been involved in this matter for a few days and while I'm doing my best to get acclimated, there has been a lot to process in a very short time.

I did not mean to suggest that Georgia Tech was directing your client to produce anything directly to the Special Counsel's office or to take on any obligations that rightfully belong to Georgia Tech. And it is certainly not Georgia Tech's intent to place your client in an untenable position. To the extent that my imprecise language may have suggested otherwise, please accept my apologies.

Would you be available for a quick call sometime today so that I can get better acquainted and discuss how to manage any issues that might need your client's logistical assistance in terms of things such as locating where responsive documents/files might be stored on Georgia Tech computers or servers? I'd be happy to give you a call at your convenience.

Best regards, Beth Young



Elizabeth (Beth) Young Assistant Attorney General Office of the Attorney General Chris Carr Government Services & Employment (404) 458-3425 eyoung@law.ga.gov Georgia Department of Law 40 Capitol Square SW Atlanta, Georgia 30334

From: Jody R Westby <westby@globalcyberlegal.com>
Sent: Tuesday, July 20, 2021 7:01 PM
To: christian.fuller@legal.gatech.edu
Cc: Elizabeth Young <EYoung@LAW.GA.GOV>
Subject: Fwd: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Christian,

My apologies, my email auto-filled the name on the note below to a friend who works at Aon. I have contacted him and asked him to ignore and delete the note and confirm. Please see note below that was meant for you. Kind regards,

Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

Begin forwarded message:

From: Jody R Westby <<u>westby@globalcyberlegal.com</u>> Subject: DARPA Date: July 20, 2021 at 6:22:14 PM EDT To: Christian Hoffman <<u>christian.hoffman@aon.com</u>> Cc: eyoung@law.ga.gov, Mark Rasch <<u>rasch@globalcyberlegal.com</u>>, Mark Rasch <

Dear Christian,

Thank you for your call today and forwarding the communications below. Please be advised that, despite your authorization, Mr. Dagon will not provide to the Special Counsel or "release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena." Global Cyber Legal and Mr. Dagon will not be responsible for Georgia Tech's response to these criminal grand jury subpoenas; Georgia Tech is solely responsible for responding to these subpoenas.

We have never seen the first subpoena Georgia Tech produced or your production; nor have we seen this second subpoena. Although Georgia Tech agreed to an informal joint defense agreement, after we produced our subpoena and relevant documents, Georgia Tech pulled back from that and refused to share any information, including providing a copy of the relevant DARPA contract (Kate provided the wrong one earlier but refused to provide the Enhanced Attribution contract). We are also not privy to your discussions with the Special Counsel office. I am sure you can understand that this puts us in an untenable position. If you need any assistance from Mr. Dagon, please let us know. Kind regards,

Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

----- Forwarded message ------From: Fuller, Christian <<u>christian.fuller@legal.gatech.edu</u>> Date: Tue, Jul 20, 2021 at 3:18 PM Cc: Elizabeth Young <<u>EYoung@law.ga.gov</u>>

Jody-

To:

DARPA's general counsel forwarded this response to Georgia Tech (see below). Based on the response, Georgia Tech can give authorization for David to release any unclassified, DARPA-related records that are considered Georgia Tech's property, pursuant to the DOJ investigative subpoena. My understanding is that David does not have any classified documents; however, if there are any classified documents, follow up with Mr. Darin Smith (as instructed below) before any exchange with DOJ.

If there are any questions or concerns, please feel free to reach out.

Thanks,

Christian Fuller

Senior Counsel, Employment & Litigation

Georgia Institute of Technology

Phone: 404-403-8204

christian.fuller@legal.gatech.edu

From: Lopes, Crane <<u>Crane.Lopes@darpa.mil</u>>
Sent: Tuesday, July 20, 2021 2:16 PM
To: DeFilippis, Andrew (USANYS) <<u>Andrew.DeFilippis@usdoj.gov</u>>; Elizabeth Young
<<u>EYoung@LAW.GA.GOV</u>>
Cc: Fuller, Christian <<u>christian.fuller@legal.gatech.edu</u>>; Wasch, Kate <<u>kate.wasch@legal.gatech.edu</u>>; Nie,
Ling-Ling <<u>linglingnie@gatech.edu</u>>; Keilty, Michael (USANYE) <<u>Michael.Keilty@usdoj.gov</u>>; Patel, Neeraj
(USACT) <<u>Neeraj.Patel@usdoj.gov</u>>; Scarpelli, Anthony (USADC) <<u>Anthony.Scarpelli@usdoj.gov</u>>;
Eckenrode, John (JMD) <<u>John.Eckenrode@usdoj.gov</u>>; Aldenberg, William B. (NH) (FBI)
<wballenberg@fbi.gov>; Maddock, Adam M. (CyD) (FBI) <<u>ammaddock@fbi.gov</u>>; James, Ryan Joseph

(INSD) (FBI) <<u>rjjames@fbi.gov</u>>; Bennett, Wes <<u>wes.bennett@darpa.mil</u>>; Smith, Darin <<u>Darin.Smith@darpa.mil</u>> Subject: RE: DARPA

Ms. Young:

Thank you for your diligence in protecting DARPA-related records and other documents from unauthorized use or disclosure.

I have discussed this matter with Wes Bennett, the Director of the DARPA Contracts Management Office. Mr. Bennett is info-copied on this message. We request that you cooperate with the Department of Justice (DoJ) by immediately providing them with all DARPA-related unclassfied documents and records in your possession and that are requested by their subpoena.

If DoJ has requested DARPA-related classified documents and records in your possession, release should be coordinated with Mr. Darin Smith, DARPA Security & Intelligence Directorate. Mr. Smith is info-copied on this message.

Please contact me if I can assist you.

Crane Lopes, Ph.D.

General Counsel

DARPA

Off | 571.218.4887 🗃

Mob | 571.239.5084



Creating BREAKTHROUGH TECHNOLOGIES

For National Security

From: DeFilippis, Andrew (USANYS) <<u>Andrew.DeFilippis@usdoj.gov</u>> Sent: Tuesday, July 20, 2021 10:51 AM To: Elizabeth Young <<u>EYoung@LAW.GA.GOV</u>> Cc: 'Fuller, Christian'<<u>christian.fuller@legal.gatech.edu</u>>; Wasch, Kate <<u>kate.wasch@legal.gatech.edu</u>>; Ling-Ling Nie (<u>linglingnie@gatech.edu</u>) <<u>linglingnie@gatech.edu</u>>; Lopes, Crane <<u>Crane.Lopes@darpa.mil</u>>; Keilty, Michael (USANYE) <<u>Michael.Keilty@usdoj.gov</u>>; Patel, Neeraj (USACT) <<u>Neeraj.Patel@usdoj.gov</u>>; Scarpelli, Anthony (USADC) <<u>Anthony.Scarpelli@usdoj.gov</u>>; Eckenrode, John (JMD) <<u>John.Eckenrode@usdoj.gov</u>>; Aldenberg, William B. (NH) (FBI) <<u>wbaldenberg@fbi.gov</u>>; Maddock, Adam M. (CyD) (FBI) <<u>ammaddock@fbi.gov</u>>; James, Ryan Joseph (INSD) (FBI) <<u>rjjames@fbi.gov</u>> Subject: DARPA

Ms. Young,

Thank you very much for our call earlier today. On that call, you requested that we provide assurance that the Defense Advanced Research Projects Agency (DARPA) has no objection to Georgia Tech's providing documents and other records in response to our federal grand jury subpoena that relate to a contract between Georgia Tech and DARPA. I am copying Crane Lopes, General Counsel of DARPA. Mr. Lopes and DARPA have been fully cooperative with and supportive of our investigative efforts. On a phone call that occurred a few minutes ago, Mr. Lopes has assured me again that DARPA has no objections to Georgia Tech's provision of any records or information (both classified and unclassified) to our team and to the grand jury.

As noted, federal law requires you to provide such records regardless of any potentially applicable contractual restrictions.

Please let me know us you have any questions. We would appreciate if you could also please confirm that you consent to the two Georgia Tech employees we discussed providing responsive records that they have identified. Thank you.

Andrew J. DeFilippis

From: Sent: To: Subject: Elizabeth Young <eyoung@law.ga.gov> Wednesday, July 21, 2021 8:00 AM 'Jody R Westby'; christian.fuller@legal.gatech.edu RE: DARPA

Ms. Wesby,

It seems I may have inadvertently created a misunderstanding in my correspondence with Special Counsel's office, especially by my references to "employees" that may have appeared to include your client. Georgia Tech had received a request to authorize the release of documents, and at the time I thought that request had come jointly from your client and Dr. Antonakasis. I'm now aware that this was incorrect and apologize for the confusion. I have only been involved in this matter for a few days and while I'm doing my best to get acclimated, there has been a lot to process in a very short time.

I did not mean to suggest that Georgia Tech was directing your client to produce anything directly to the Special Counsel's office or to take on any obligations that rightfully belong to Georgia Tech. And it is certainly not Georgia Tech's intent to place your client in an untenable position. To the extent that my imprecise language may have suggested otherwise, please accept my apologies.

Would you be available for a quick call sometime today so that I can get better acquainted and discuss how to manage any issues that might need your client's logistical assistance in terms of things such as locating where responsive documents/files might be stored on Georgia Tech computers or servers? I'd be happy to give you a call at your convenience.

Best regards, Beth Young



Elizabeth (Beth) Young Assistant Attorney General Office of the Attorney General Chris Carr Government Services & Employment (404) 458-3425 eyoung@law.ga.gov Georgia Department of Law 40 Capitol Square SW Atlanta, Georgia 30334

From: Jody R Westby Sent: Tuesday, July 20, 2021 7:01 PM To: christian.fuller@legal.gatech.edu Cc: Elizabeth Young Subject: Fwd: DARPA

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Searches could be run for at least: All Trump owned domains Alfa Bank Spectrum Health Domo.com

Data Transfer Files

The files documenting when GT received data from Neustar for the Enhanced Attribution contract.

I hope this is helpful. Please let me know if you have questions. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

On Jul 23, 2021, at 3:30 PM, Jody R Westby <westby@globalcyberlegal.com> wrote:

Beth,

At our direction, David made a list of documents/data sources that he thought would be responsive to the subpoena. They are:

DARPA whitepapers

Whitepaper on DNC attack attribution

Analysis of attacks of EOP (Executive Office of the President) networks Whitepaper for DOJ on APT-29 related hackers, crypto coin transactions, and analysis that includes Yota-related domains "Mueller List" - list of domains and indicators related to APT-28

BLU Phones directory of files

Rhamnousia chat logs

We may have further information after we are able to speak to our client, but not sure when that will be at this point. Hope this is helpful to you. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com

On Jul 23, 2021, at 3:30 PM, Jody R Westby <<u>westby@globalcyberlegal.com</u>> wrote:

Beth,

At our direction, David made a list of documents/data sources that he thought would be responsive to the subpoena. They are: DARPA whitepapers Whitepaper on DNC attack attribution Analysis of attacks of EOP (Executive Office of the President) networks Whitepaper for DOJ on APT-29 related hackers, crypto coin transactions, and analysis that includes Yotarelated domains "Mueller List" - list of domains and indicators related to APT-28

BLU Phones directory of files

Rhamnousia chat logs

We may have further information after we are able to speak to our client, but not sure when that will be at this point. Hope this is helpful to you. Kind regards, Jody

Jody R Westby, Esq. Managing Principal Global Cyber Legal LLC +1.202.255.2700 westby@globalcyberlegal.com www.globalcyberlegal.com From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Tuesday, November 6, 2018 7:15:40 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: Accepted: Case 21 sync (Conference Call) Attachments: meeting.ics (1.36 KB) From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Monday, April 30, 2018 5:05:23 PM To: Livingood, Jason <Jason_Livingood@comcast.com>; Hook, Lisa <lisa.hook@team.neustar>; Matt.Carothers@cox.com CC: Keromytis, Angelos <angelos.keromytis@darpa.mil> Subject: DARPA D60 event

Many thanks Angele!

Jason, Matt and Lisa. Please see inline message from Angelos. If you want to attend the (invitation only) DARPA D60 event (<u>https://www.darpa.mil/about-us/d60-about</u>), please go ahead and register.

This is a way for Angelos (and DARPA) to show you their appreciation for helping GT out in our research, I suspect. :)

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent: Monday, April 30, 2018 11:49 AM To: Antonakakis, Manos Subject: Comcast, Cox, and Neustar

I don't have their contact info, so please pass along my invitation to the DARPA 60th anniversary celebration in early September. They should register ASAP at:

https://www.darpa.mil/about-us/d60-about

If they need to list a sponsor, use me. -Angelos From:Keromytis, Angelos<angelos.keromytis@darpa.mil>Sent on:Monday, April 30, 2018 3:49:12 PMTo:Manos Antonakakis<manos@gatech.edu>Signed by:KEROMYTIS.ANGELOS.D.1501999799 on Monday, April 30, 2018 3:49:12 PMSubject:Comcast, Cox, and Lisa (Neustar)Attachments: Nameless.txt (260 Bytes)

I don't have their contact info, so please pass along my invitation to the DARPA 60th anniversary celebration in early September. They should register ASAP at:

https://www.darpa.mil/about-us/d60-about

If they need to list a sponsor, use me. -Angelos My tour at DARPA ended on 20 December, 2018. For matters relating to programs I previously managed, please contact the following SETAs:

- AA, WASH: Susan Kloss (susan.kloss.ctr@darpa.mil<mailto:susan.kloss.ctr@darpa.mil>)

- ACD, ADAMS: Dan Adams (daniel.adams.ctr@darpa.mil<mailto:daniel.adams.ctr@darpa.mil>)
- EA: Chris Schneck (christopher.schneck@darpa.mil<mailto:christopher.schneck@darpa.mil>)
- HACCS: Alison Kline (alison.kline.ctr@darpa.mil<mailto:alison.kline.ctr@darpa.mil>)
- TC, LADS: Mary Denz (mary.denz.ctr@darpa.mil<mailto:mary.denz.ctr@darpa.mil>)

For non-DARPA matters, you may contact me at angelos@gatech.edu<mailto:angelos@gatech.edu>

From: Keromytis, Angelos <angelos.keromytis@darpa.mil> Sent on: Thursday, January 4, 2018 8:49:31 PM To: The second secon

https://carnegieendowment.org/2018/01/04/iran-s-cyber-threat-espionage-sabotage-and-revenges-pub-75134

From:	Keromytis, Angelos <angelos.keromytis@darpa.mil></angelos.keromytis@darpa.mil>	
Sent on:	Thursday, November 2, 2017 5:49:01 PM	
To:	manos@gatech.edu;	
CC:	Patel, Tejas (contr-i2o) <tejas.patel.ctr@darpa.mil></tejas.patel.ctr@darpa.mil>	
Signed by:	KEROMYTIS.ANGELOS.D.1501999799 on Thursday, November 2, 2017 5:49:00 PM	
Subject:	also of interest	
Attachments: Nameless.txt (113 Bytes)		
https://www.apnews.com/3bca5267d4544508bb523fa0db462cb2		

From: "Antonakakis, Manos" <th>EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP</th>	EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP	
(FYDIBOHF23SPDLT)/CN=RECIPIEN	TS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS>	
Sent on: Monday, August 7, 2017 3	:14:21 PM	
To: Mike F	; Patel, Tejas H CTR (US) <tejas.patel.ctr@darpa.mil>; Keromytis, Angelos D CIV DARPA</tejas.patel.ctr@darpa.mil>	
(US) <angelos.keromytis@darpa.mil></angelos.keromytis@darpa.mil>		
Subject: Data from Daniel		

Gents, on the GT server you all have access, under

, you can find the data that Daniel gave to us.

Thanks,

Manos Antonakakis | manos@gatech.edu FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668 From: "Antonakakis, Manos" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7E6B0AFC581E477DB35A37C3A3A79AEB-ANTONAKAKIS> Sent on: Saturday, November 3, 2018 2:44:27 PM To: Keromytis, Angelos <angelos.keromytis@darpa.mil>; Smith, Jonathan <Jonathan.smith@darpa.mil> Subject: A few thoughts

Gentlemen,

Given the success we had so far on modeling the first four TTPs, we can now see a clear path on how we can fine tune these TTPs in the Pythia oracle. Those TTPs clearly work for groups like EG, out of RU, IR and SA. Maybe more, but these are the ones we have hard data for.

In the last site review meeting we set as goals two things: 1) transition of the Oracle (ActiveDNS mode) to TA2 performers and potential technology transition partners, and 2) the implementation of the remaining 8 TTPs.

The first of these two goals has been achieved. Kudu, Jim, and the AFOSI folks have access to Pythia. The next thing on my queue is to implement some of the remaining TTPs.

After the 4 new case studies in the last month alone (2 from the FBI at Huntsville, DHS and Cyber-command), while people are interested in our attribution results, they are (cynically) using them as a remediation/incident response signal. To that end, I thought it would be best for me to spend a few months building a new classification system that could differentiate between "different modes" that the domains are in. That is, once a domain is identified being part of an APT group, I would like to be able to have (at the very least) a Social Engineering vs. C&C vs. Both set of scores assigned to it.

Have done something similar in the past for malware domains (Kopis paper: <u>http://tinyurl.com/usenixsec11-kopis</u>). The concept could remain somewhat similar, but the code base will have to be rewritten from scratch due to the size and type of our data. The benefit for the program will be huge, IMHO. The reason I think it will be huge is because we have seen to date that there is one thing we can always rely upon: The target networks. If we build such a classification system, I think, given a small set of interesting targets we will very easily find the rest (these will be the networks that systematically are looking up these interesting domains).

Most importantly, this will be a major and fundamental breakthrough on the way we approach the IoC discovery problem. To date, we are waiting for a report to come out or simply declassified IoCs from the high side. Neither of the two can be automated. Instead, if we focus on the target networks (domestic or foreign), we could achieve the systematic retrieval of reliable pools of new IoCs extracted daily from the raw datasets. These new (unknown) IoCs will allow us to start enriching clusters of interesting activity in Pythia, which could reflect bran new operations from unknown actors coming into play.

Obviously, the implementation of such a classification system will only yield more actionable intelligence to our technology transition partners, which can only be good for the program.

So, what do you think is the best thing to do for the program? Continue the development of the remaining TTPs or try to build a tailored classification system in Kopis' spirit?

Thanks,

Manos Antonakakis | manos@gatech.edu Georgia Institute of Technology FF7D 4FDF 9115 8077 92D2 5B59 5120 5E89 BE1B 3668