NSF and SaTC need YOU!

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Dr. Deborah Shands Program Director, National Science Foundation



NSF and the Research/Education Community are Mutually Dependent

- Before it is funded, each NSF/SaTC research proposal is read and evaluated by:
 - 4 panelists or other reviewers
 - Minimum of 2 program directors
- Where do panelists and program directors come from?
 - The security and privacy research community!
- NSF needs YOU to serve as panelists and program directors!



Serving as a Panelist



SaTC Volunteer Panelist Survey (1)

- <u>https://www.surveymonkey.com/r/SaTC_Spring_2017</u>
- Survey is now open at a browser near you! (closes Wednesday)
- Current approach to discovering/coordinating researchers to serve on SaTC panels
- Target: 20% first-time panelists on SaTC Small panels
- Program directors have < 1 week to fill panel roles and coordinate
 - Essential that you HOLD OPEN the dates you volunteer to us



SaTC Volunteer Panelist Survey (2)

- <u>https://www.surveymonkey.com/r/SaTC_Spring_2017</u>
- Old approach
 - Program directors email researchers that they know have the necessary expertise
 - Limited pool of reviewers
 - Unscalable!
 - Proposal volume
 - Many program directors must coordinate
 - Research disciplines included within SaTC are incredibly broad



Serving as a "Rotator" SaTC Program Director



Comments from Former SaTC Program Directors

• "Serving SaTC allowed me to meet and encourage the brightest junior faculty from across the country - the next generation's superstars".

– Jeremy Epstein

 "Serving as an NSF Program PD was an incredibly rewarding experience that allowed me to get a spectacularly broad view of cybersecurity research and understand how government works, while feeling good about doing public service. "

– Angelos Keromytis

• "It has been an honor and a pleasure working at NSF. I LEARNED a lot — better sciences, better interdisciplinary collaborations, and better financial management skills. Thanks to my rotation, now I have a better vision in my own academic work and life."

- Heng Xu

"One aspect I hadn't expected was the extent to which my ``legacy" continued after I left. I've seen things written in solicitations, projects funded, and even happenings in other agencies that I feel that are a result of my efforts, even though they happened after I left."
Chris Clifton

• Reference: J. Epstein, "Reflections of an NSF Program Officer," IEEE Security & Privacy, March/April 2016.



Becoming a "Rotator" Program Director

- Come to Washington, D.C. and spend a few years supporting SaTC and other NSF programs
 - Stay up to 4 years (most stay for 2-3 years)
 - Decide one year at a time
 - Most program directors support more than 1 program great view of NSF program landscape
- How?
 - Start by contacting a current SaTC program director



SaTC Program Director Topic Areas

Program Director		Торіс
Nina Amla	namla@nsf.gov	Formal methods, crypto (CISE)
Dan Cosley	dcosley@nsf.gov	usability, user modeling, social computing, social networks (CISE)
Sol Greenspan	sgreensp@nsf.gov	Software engineering (CISE)
Tim Hodges	thodges@nsf.gov	Mathematics, algebra, and cryptography (MPS)
Sara Kiesler	skiesler@nsf.gov	Privacy, social and behavioral sciences, usability (SBE)
Wenjing Lou	wlou@nsf.gov	Wireless, networking (CISE)
Anita Nikolich	anikolic@nsf.gov	Transition to practice, networking, SW Defined Networks (CISE)
Victor Piotrowski	vpiotrow@nsf.gov	Education, CyberCorps [®] SFS, cyber operations (EHR)
Andrew Pollington	adpollin@nsf.gov	Mathematics, number theory, theoretical crypto (MPS/DMS)
Yan Solihin	<u>ysolihin@nsf.gov</u>	Hardware and Computer Architecture (CISE)
Deborah Shands	dshands@nsf.gov	Systems, cloud, CPS/IoT, scalable security administration (CISE)
Chengshan Xiao	<u>cxiao@nsf.gov</u>	Physical layer communications, signal processing (ENG)
Nan Zhang	nanzhang@nsf.gov	Privacy, data science (CISE)

*Rotating out within the year

Other NSF Programs Addressing Cybersecurity

- [CPS] Cyber-Physical Systems
 - To develop the core system science needed to engineer complex cyberphysical systems upon which people can depend with high confidence
- [CICI] Cybersecurity Innovation for Cyberinfrastructure (CICI)
 - To protect the integrity and reliability of the end-to-end scientific workflow
- Smart & Connected Communities (S&CC)
 - To advance understanding of our cities and communities to improve their functioning and quality of life within them through innovations in computing, engineering, information and physical sciences, social, and learning sciences

• [BIGDATA] Big Data

 To develop critical techniques and new technologies to address the challenges of big data in critical areas such as privacy, climate change, and biodiversity



Learn More

• [CPS] Cyber-Physical Systems

CPS Virtual Organization: <u>http://cps-vo.org/</u>

 [CICI] Cybersecurity Innovation for Cyberinfrastructure

Join the ACI announcements mailing list by sending email to: <u>ACI-ANNOUNCE@LISTSERV.NSF.GOV</u>

[S&CC]Smart & Connected Communities

S&CC program page: https://www.nsf.gov/cise/scc/

• [BIGDATA] Big Data

BIGDATA program page: <u>https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504767</u>



Questions?



National Science Foundation 4201 Wilson Blvd Arlington, Virginia 22230 USA Deborah Shands, Ph.D

Secure and Trustworthy Cyberspace (SaTC) Program

Email: dshands@nsf.gov Phone: +1 703-292-4505 Website:

http://www.nsf.gov/pubs/2016/nsf16580/ nsf16580.htm

