

2014 CONFERENCE



APRIL 11 & 12
NASHVILLE, TN

FUNDED BY

National Science Foundation,
Award #1303441

11-APR-14

1:30 - 5:00 pm

BALLROOM FOYER

Registration

Registration will open at 1:30 PM

Refreshments will be served from 2:30 PM

2:00 - 4:30 pm

MEMPHIS

Workshops

Security Competition Student Workshop: *Jason Pittman, Capitol College*

KNOXVILLE

Secure Coding Faculty Workshop: *Elizabeth Hawthorne, Union County College and Blair Taylor, Towson University*

4:30 - 5:30 pm

BALLROOM FOYER

Student Sessions

Student Poster Session

SALON A

Resume Clinic: *Don Foster, Tennessee Tech University*

5:30 - 6:45 pm

Dinner

Welcome: *Joseph Rencis, Dean, College of Engineering, Tennessee Tech University*

Opening: *Ernest McDuffie, Lead for National Initiative for Cybersecurity Education (NICE), National Institute of Standards and Technology (NIST)*

CUMBERLAND

BALLROOM

Keynote: *Deb Frincke, Commandant National Cryptologic School/Training Director NSA*

Follow Your Heart While Using Your Head: *The talk will build on the speaker's personal journey, through university educator, startup company, chief scientist at a national laboratory, and now senior executive leadership at the National Security Agency. The speaker will emphasize "ah ha!" moments and turning points along the way.*

7:00 - 7:45 pm

Session I with Distinguished Speakers

Track A: Research

Session Chair: *Terry Benzel, USC Information Sciences Institute*

Jaeyeon Jung, Microsoft Research

SALON F

Consumer privacy protection on mobile devices: *The talk will discuss limitations of the current mobile ecosystem that permitted "unexpected use" of privacy-sensitive information, including ineffective permission request dialogs, lack of data flow feedback to users, and little technical support to app developers for "privacy debugging". Will present speaker's past and current research projects to address some of these issues.*

Track B: Education

Session Chair: *Soon Ae Chun, City University of New York*
Diana L. Burley, CRA Distinguished Speaker, George Washington University

SALON G-H

Disrupt!: *The complex cybersecurity environment requires actions and voices that disrupt accepted thought patterns and challenge the status quo. This talk will share how speaker discovered the value of disruptive ideas for addressing*

the nation's cybersecurity challenges, and will encourage you to think about how you can frame your education and experience in this same way.

Track C: Industry

Session Chair: Dawn Carroll, Cigital Inc.

Lisa Foreman, Women's Society of Cyberjutsu

SALON E

Cyberjutsu: The Art of Cyber: *Founder & CEO of the Women's Society Cyberjutsu, shares her journey into the cyber profession. The talk will discuss why there has never been a better time to be a cyber professional and how women can provide new insight and capabilities to this challenging and rewarding career. Speaker will illustrate how we possess the innate ability to lead teams and provide solutions to complex challenges.*

7:45 - 8:30 pm

Session II: Technical Presentations by Attendees

Track A: Research

Session Chair: Elizabeth Hawthorne, Union County College & ACM-W

Emily Shen, MIT Lincoln Lab

SALON F

Efficient, Privacy-Preserving Data Sharing: *Modern cryptography provides several different types of tools that offer the promise of searching on encrypted data. This talk will illustrate the cryptographic advances that make these technologies possible. Additionally, the rigorous software engineering and formal techniques employed by MIT Lincoln Laboratory to test that the researchers' software met all of the security, functionality, and performance requirements will be described.*

Track B: Education

Session Chair: Angela Clark, University of South Alabama

Diane Murphy and Michelle Liu, Marymount University

SALON G-H

Redefining Cybersecurity Competitions to Increase Female Participation:

One of the first exposures to cybersecurity for young people is often the cybersecurity competition, offered at the high school and college levels. Most of these competitions have a decidedly "male" focus, based on military principles, emphasizing success as being successful "attacks" to a system. As a result, very few females are attracted to these events and only a few participate. How can that be changed? This work, sponsored by the National Science Foundation (NSF) under award number 1318799, will describe some of our research on cybersecurity competitions, particularly female participation, on our experience with facilitating student involvement in developing the competition platform, and our approach to attracting female high school students to the summer institute.

Track C: Industry

Session Chair: Sherida Jacob, Department of Defense

Robin Williams, Chief, National Cybersecurity Education & Awareness Branch, Department of Homeland Security

SALON E

Cybersecurity — What Women Bring: *This presentation focuses on national effort to raise the bar of cybersecurity skills across the nation, and how women are key to the success of our nation's efforts to protect our economic and national security.*

8:30 - 9:15 pm

Session III: Panel Session

Track A: Research

(Moderator) Sharon Burlingame: Pellissippi State Community College

(Panelists) Valerie Barr: National Science Foundation, Terry Benzel: University of Southern California, David Dampier: Mississippi State

SALON F

University, Li Yang: University of Tennessee at Chattanooga

Obtaining Funding for Cyber Security Initiatives: Panelists who have written successful grants will share their insights, success stories, challenges, opportunities, and strategies for obtaining funding and maintaining successful programs.

Track B: Education

(Moderator) Lisa Duge: Johns Hopkins University (Panelists) Diana Burley: George Washington University, Ronda Henning: Harris Corporation/Florida Institute of Technology, Jaeyeon Jung: Microsoft Research, Susanne Wetzel: Stevens Institute of Technology

SALON G-H

Graduate School Panel: A graduate school panel would be a great way for undergraduate students or professionals seeking another degree to learn about educational opportunities. The panel members could consist of: graduate students, professors, and current professionals who attended grad school. Topics to discuss include scholarships (SFS and others), degree choices (computer science, information security, policy), benefits, and finding the right program.

Track C: Industry

(Moderator) Dawn Beyer: Lockheed Martin (Panelists) Jacqueline Bow: MIT Lincoln Laboratory, Linda Ciulla: RSA, Eleni Gessiou: Facebook, Perri Nejb: Lockheed Martin

SALON E

How Did I Get Here: My Struggles and Triumphs: Technical women across cybersecurity industry will share experiences and thoughts on the industry world of cyber security, how they got there, challenges and overcoming of challenges, and the opportunities the area presents. Goal is to foster interest in cyber security as a career in industry and provide guidance on how to pursue.

9:15 - 9:45 pm

Session IV: BoFs (Birds of a Feather Sessions)

Track A: Research

Session Chair: Lynn Lovewell, University of Southern Maine
Rose Shumba: UMUC, Rebecca Bace: University of South Alabama, Corrinne Sande: Whatcom Community College, Carol Taylor: Eastern Washington University

SALON F

Is Cybersecurity different from Computer Science with regard to Recruiting and Retaining Women and Minorities in the field?: This BoF session will discuss whether Cybersecurity is indeed substantially different from Computer Science (CS) with regard to recruiting and retaining women and minorities in the field. This work is a continuation of the ITiCSE 2013 Working Group (WG) on Cybersecurity, Women and Minorities.

Track B: Education

Session Chair: Simin Hall, Virginia Tech
Barbara Hewitt, Texas A&M University

SALON G-H

Enhancing Classroom Learning About Security with other Opportunities: This discussion will stem around the mechanisms that instructors can use to enhance the delivery of security content including meetings such as local ISSA meetings, webinars, conferences, YouTube Videos, hands-on workshops, internships, class field trips, speakers, competitions, and online course delivery.

Track C: Industry

Session Chair: Jean Pawluk
Caroline Dennis, Career Catalyst

SALON E

Information Security Career Trends: What's Hot and Where do You Fit?: This discussion will kick off with a broad overview of the current and emerging job outlook of infosec professionals. Other topics of discussion will be about what kind of

job environments exist and how can women find their place in it. This discussion will be aimed at helping to bring the various career choices into better focus.

9:45 - 10:45 pm Social/Networking/Ice-breaker Activity
Fun and Fondue: Susan Kevra and The Cantrells
End of Day 1

12-APR-14

8:15 - 9:45 am Breakfast

Opening Remarks: Valerie Barr, Program Director, NSF

Keynote: Michele Cantley, Senior Vice President and Chief Information Security Officer, Regions Financial

How to Establish a Career in Cybersecurity and the Track to Becoming a CISO: The talk will address the do's and don'ts with regard to degrees, certifications and experience. The speaker will also provide helpful advice on the skills needed by a CISO and her personal experiences with the paths various CISO's (including herself) have followed to get the job. Lastly, she will address the all important topic of networking.

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9:45 - 10:45 am Session V: 5 Minute Lightning Talks

Session Chair: Ashley Spangler, ISACA

Kieu Lam, Facebook

2fac authentication + your organization: Will present how Facebook implemented 2fac authentication using the latest technologies with the least amount of friction. Security can be simple and sexy.

Dawn Carroll, Cigital

Networking for the Introverted: Will focus on ways to get out of introvert shell and push oneself into unfamiliar waters to achieve success.

Melaina Myers and Vitaly Ford, Tennessee Tech University

CyberEagles: A cybersecurity club for students: Will present the benefits and mechanisms of initiating and sustaining a cybersecurity club for students. TTU CyberEagles club will share their story.

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Susanne Wetzel, Stevens Institute of Technology

Pathways in Cybersecurity between 2-Year and 4-Year Institutions: Will present the pilot study between Union County College and Stevens Institute of Technology to explore options for a pathway between 2-year and 4-year institutions. We will discuss opportunities, challenges, and lessons learned to date.

Dawn Isabel, Hewlett-Packard

Data, Unprotected: How mobile applications betrayed my trust: Will present the results of analyzing personal smartphone for evidence of sensitive data disclosure, and summarize best practices for protecting your data — even when your apps don't.

Dale Rowe, Brigham Young University

Continuing Education: Will present continuing education opportunities for women focusing on Graduate studies and Certifications. Based on experiences within IT program.

Suzanne Mello-Stark, University of Rhode Island

Digital Forensics and Cyber Security: Will present Digital Forensics and Cyber

Security Programs overview, differences, opportunities and example in University of Rhode Island.

Jeremy Epstein, NSF

Scholarships for Women Studying Information Security (SWSIS): SWSIS offers various scholarships for women studying any aspect of information security at an undergraduate or masters' level. Will describe the history and future of the program, and describe the requirements and deadlines for application.

10:45 - 11:00 am Group Picture Session

11:00 - 11:15 am Refreshment Break

11:15 - 12:00 pm Session VI with Distinguished Speakers

Track A: Research

Session Chair: Diane Murphy, Marymount University

Jeanna N. Mathews, ACM Distinguished Speaker, Clarkson University
Strategies for Research in Computer Security: The talk will discuss strategies for finding important and inspiring cybersecurity problems that you are able and ready to solve. We will look at concrete examples of using readily available systems and data to study attackers and their methods. We will then discuss how to take the insight you gain and turn it into high quality publications

SALON F

Track B: Education

Session Chair: Chrisila Pettey, Middle Tennessee State University

Cynthia Irvine, Naval Postgraduate School

Through the tangle of cyber education: Is learning cyber security a sentence to life in the cyber dungeon as a boring drone? No! This talk will explore the context of cyber studies and how various paths in the classroom can lead to fulfilling careers.

SALON G-H

Track C: Industry

Session Chair: Viola Williams, Active Health

Merisa Viveros, Vice President, Cyber Security Innovation Initiative, IBM Corporation

Leading a Security Team: Challenges and Rewards: This presentation describes the challenges that security leaders must face in an environment of increasing threats. Deriving from experiences in the field, it recommends best practices for addressing and solving these challenges, by leveraging people, processes and technology. It also highlights the increasingly important and technically rewarding role played by skilled security professionals.

SALON E

12:00 - 12:45 pm Session VII: Technical Presentations

Track A: Research

Session Chair: Amy Butler, George Washington University

Limin Jia, Carnegie Mellon University

Formal Models and Verification of Software Systems: Formal verification of system properties is crucial to the security of software systems. Combining the design, implementation, and verification of software systems can produce high-assurance systems. This talk will present two research projects where the modeling and verification play a central role in ensuring the security of the software systems.

SALON F

Track B: Education

Session Chair: Patricia Tamburelli, County College of Morris

Dianne Fordell: IBM and Scott Buck, Intel

SALON G-H

Industry Resources for Universities for Supporting Cyber Security Education: *This presentation demonstrates how industry, particularly IBM and Intel can assist university faculty in developing and delivering excellent security education to university students around the world.*

Track C: Industry

*Session Chair: Patricia McQuaid, California Polytechnic State University
Lora McIntosh: Regions*

SALON E

Application Security: (White Hat) Hacking for a Living: *Popular culture would have us believe that the only hackers are anti-social males who spend every day in a basement trying to steal your credit cards, money and identity. On the contrary, a number of skilled hackers are behind the scenes at companies worldwide. These individuals work to exploit applications and push for remediation so that malicious hackers cannot exploit them. This talk will explore web application security in the corporate world and the major application flaw types as well as the knowledge, skills, and tools to it takes to be a professional white hat hacker.*

1:00 - 2:30 pm

Lunch

NCWIT TN Aspiration Awards: Ruthe Farmer, Director of Strategic Initiatives, National Center for Women & IT (NCWIT) and Martha Kosa, TTU

WiCyS Poster Awards

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Closing Remarks: Becky Bace, Chief Strategist for the Center for Forensics, Information Technology and Security (CFITS), University of South Alabama

2:30 - 4:30 pm

Refreshment Break

SALONS E-H

Career & graduate school Fair

Workshops

MEMPHIS

Discovering CyberSecurity Student Workshop: Tom Pigg and Lisa Matlock, Jackson State Community College

KNOXVILLE

Facilitating Active Learning in Security Faculty Workshop: Ambareen Siraj, Tennessee Tech University

End of Day 2

SPECIAL THANKS TO:

Resume Clinic Experts

Anna Wilbanks
Ksenia Dmitrieva
Sherry Levin
Susan Keith
Wendy Murphy

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Cara Tang
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Denecke
Cindy Tucker
Claire Lavelle
Deanne Cranford-
Wesley
Debra Chapman
Julia Bell
Khadija Stewart

Kristy Seaton
LaToya Staten
Laura Pullum
Leah R. Pietron
Lou Ann Stroup
Na Li
Nancy Smithfield
Philip Armbrust
Sandra McLeod
Sharon Burlingame
Tamara Griffin
Yesem Peker

Poster Session Judges

Anna Jo Stephens
Areej Albataineh
Brooke Mullican

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