

Thursday, June 9, 2022

7:30am	Registration (No breakfast provided) (8th floor Ballroom)		
8:00am	Welcome (8th floor Ballroom)		
8:15am	CAE-C Community Updates (8th floor Ballroom)		
8:45am	NCAE-C Partner Updates (8th floor Ballroom)		
9:45am	Break		
10:00am	Competitions (8th floor Ballroom) Jake Mihevc		
10:30am	CARD and CLARK (8th floor Ballroom) Sidd Kaza and Blair Taylor		
10:55am	KU Initiatives (8th floor Ballroom)		
11:10am	CAE-R Designation Presentation (8th floor Ballroom)		
12:00pm	Working lunch – box lunch grab and go to:		
	CAE-CD Track 12:00pm: Fast Pitch Talks 1:10pm: Break 1:20pm: Presentations 2:45pm: Break 3:00pm: Presentations	CAE-CO Track 12:00pm: CO POC Meeting with KUs 2:45pm: Break 3:00pm: CO Designation Criteria (open to all with a Q&A)	CAE-R Track 12:00pm: CAE-R Designation Q&A 1:00pm: Research Grant Presentations 2:45pm: Break 3:00pm: CAE-R POC Meeting
4:45pm	Break		
5:00pm-9:00pm	Sponsor Mixer (6th Floor) - Hors D'oeuvres and poster presentations (please note, posters will be unattended)		

Friday, June 10, 2022

8:00am	NCAE-PMO and NICE Updates (8th floor Ballroom) Working Breakfast	
8:30am	CAE Community service recognitions (8th floor Ballroom)	
9:00am	Keynote (8th floor Ballroom)	
9:45am	Keynote Q&A (8th floor Ballroom)	
10:00am	Morning Break	
10:15am	CAE-CD Track 10:15am: CAE Panel Presentation 11:00am: New CAEs and New POCs Meet-and-Greet with welcome by Lynne Clark (Ballroom)	CAE-R Track 10:15am: TD Panel 11:15am: INSuRE+C Student Project Presentation
12:15pm	Dismissal/Closing Remarks (Lunch not provided) Tony Coulson	



CAE-R Schedule

Thursday, June 9, 2022

11:00am

Presentation CAE-R (Re-)Designation (8th Floor Ballroom)

Session Chairs: Cynthia Irvine and Susanne Wetzel

12:00pm

Q&A on CAE-R (Re-)Designation

Session Chair: Agnes Chan

1:00pm

Research Grantee Presentations (6th floor, Chastain 1 and 2)

Session Chair: Eugene Vasserman

1:00pm: Overview of CAE Research Program, *Alice Smitley*, NSA

1:20pm: Path-Aware Risk Scores for Access Control in Zero-Trust Systems, *Philip Brown*, University of Colorado, Colorado Springs

1:40pm: Juicing V8: A Primary Account for the Memory Forensics of the V8 JavaScript Engine, *Ibrahim Baggili, Samuel Bergami, and Enoch Wang*, Connecticut Institute of Technology

2:00pm: Exploration of Heuristic and Probabilistic Tools in Quantum Computing with Applications to Cryptography, *Hugo Delgado*, Polytechnic University of Puerto Rico

2:20pm: CanarySat: A Virtual CubeSat Model for Cybersecurity Research and Education, *David Coe, Aleksandar Milenkovic, Jeffrey Kulick and Letha Etzkorn*, The University of Alabama in Huntsville

2:40pm

Break

3:00pm-5:00pm

CAE-R Point of Contact Meeting (6th floor, Chastain 1 and 2)

Session Chairs: Agnes Chan and Susanne Wetzel

Friday, June 10, 2022

9:00am-9:45am

Keynote: Cybersecurity Research at the National Security Agency: Current Directions and Future Challenges (8th floor Ballroom)
Dr. Mark Segal, Deputy Director
NSA Research Directorate

10:15am

Panel of Technical Directors for the INSuRE Program (6th floor, Chastain HIJ)
Session Chair: Susanne Wetzel
Timothy Davison, Johns Hopkins University Applied Physics Laboratory
Roland Varriale, Argonne National Laboratory
Edward Ziegler, National Security Agency

11:15am

INSuRE+C Student Presentations (6th floor Chastain HIJ)
Session Chair: Shambhu Upadhyaya

11:15am: *Audio Deepfake Detection*, *Chengzhe Sun*, SUNY Buffalo, *Ehab AlBadawy*, University of Albany, *Siwei Lyu*, SUNY Buffalo, *Timothy Davison*, JHU Applied Physics Lab, *Sarah Robinson*, JHU Physics Lab, *Nathaniel Kavalier*, JHU Applied Physics Lab

11:45am: *Towards a Rigorous Approach for Zero Trust in the 5G Core*, *Norbert Ludant*, Northeastern University, *Guevara Noubir*, Northeastern University, *Marinos Vomas*, Northeastern University

12:15pm

Closing Remarks

10:15am-4:00pm

Special Topics Workshop: Transformational Research in Usable Security (Event in Parallel, By Invitation Only) (Chastain C)
Workshop Organizers: Heather Lipford, University of North Carolina Charlotte and Cori Faklaris, Carnegie Mellon University
Participants: Hana Habib, Carnegie Mellon University, Apu Kapadia, University of Indiana, Frank Li, Georgia Tech, David Maimon, Georgia State University, Michelle Mazurek, University of Maryland, College Park, Xinming Ou, University of South Florida

CAE-CD Schedule

Thursday, June 9, 2022

12:00pm

Fast Pitch Talks – 10 minutes each (rooms run concurrently)

Room 1 (Chastain DE)

Session Chair: Anna Carlin

What is Missing in Cybersecurity Curriculum?

Bo Yuan, Rochester Institute of Technology

OpenStack Private Cloud for Cyber Capstone Development and Implementation

Chuck Bane, University of San Diego

Incorporating AI Into Software Reverse Engineering Courses

Xiuwen Liu, Florida State University
Mike Burmester

How to Build Large Student Cyber Clubs

Mike Morris, Western Governor's University

Lessons Learned from the Development of Dual-Enrollment Programs with High Schools

Yair Levy, Nova Southeastern University

CAE-CD is Not the end goal, it is the first door to a world of opportunities for Cyber Initiatives

Shankar Banik, The Citadel

Room 2 (Chastain FG)

Session Chair: Anne Kohnke

Establishing New K-12 Pathways

Andrew Lutz, Johnson County Community College

Micro Transcripts: Quantifiable and Auditable Workforce Readiness Transcripts (WRT) for Internships

Ram Dantu, University of North Texas
Mark Thompson

Developing Competency Through Competitions

Dan Manson, Cal Poly Pomona
Morgan Zantua

A Final Stop of the CWCT Journey: Training Participant Job Placement with Certifications

Mengjun Xie, University of Tennessee at Chattanooga
Stephen Reiter

The UAH Cyber Force Incubator

Tommy Morris, The University of Alabama in Huntsville

The easiest interview answers - your story

Robert Loy, Grand Canyon University

12:00pm

Room 3 (Chastain HIJ)

Session Chair: Margaret Taylor

Cybersecurity Pathways: Implementing a Systems Based Approach Through Mentoring

Lonnie Decker, Davenport University
Teha Emmons

Stepping-Stone Intrusion Upstream Detection Using Round Trip Time Distribution

Jianhua Yang, Columbus State University

Hierarchical Multi-Blockchain Architectures for Autonomous Management of Medical Data/Devices

Mike Burmester, Florida State University
Xiuwen Liu

Critical Infrastructure – Training

Dipankar Dasgupta, University of Memphis
Jim McGinnis

Education on Cybersecurity Issues with Smart Power Grid

Mohd Hasan Ali, The University of Memphis

Waleed Farag, Indiana University of Pennsylvania

Benefits from a Novel Outreach Project that Supports Cybersecurity Professional Development

1:20pm

Presentations – 20 minutes each (rooms run concurrently)

Room 1 (Chastain DE)

Session Chair: Greg Laidlaw

Making Knowledge Units Work for Your Program

Art Conklin, University of Houston
Seth Hamman

The Lack of Incident Response Curriculum in the CAE Community: Call to Action

Casey O'Brien, University of Illinois Urbana-Champaign
David Umphress

ERAU & A-ISAC CTF: Raising Awareness about Aviation Cybersecurity

Jesse Chiu, Embry-Riddle Aeronautical University - Prescott Campus
Krishna Sampigethaya

Developing a “Hands On” Security Compliance Course

Joseph Jeansonne, Pitt Community College

CAE-CD Schedule

1:20pm

Presentations – 20 minutes each (rooms run concurrently)

Room 2 (Chastain FG)

Session Chair: Loyce Pailen

Ensuring consistency across the curriculum

Brandy Harris, Grand Canyon University

Mapping of the NERC-CIP Standards with the NIST CSF

Guillermo Francia, University of West Florida

Building a Smart Secure Manufacturing Testbed Using Zero Trust Model, Machine Learning and 5G

Holly Yuan, University of Wisconsin-Stout
Brandon Cross

RMF vs CSF: Which is Better for Higher Ed?

Matt Paulson, Weber State University

Room 3 (Chastain HIJ)

Session Chair: Kim Muschalek

Ransomware Incident Preparations with Ethical Considerations and Command System Framework Proposal

Stanley Mierzwa, Kean University

Meeting the Cybersecurity Workforce Challenge: One Goal, Innovative Solutions

Eman El-Sheikh, University of West Florida
Michael Tu, Purdue University Northwest
Andrew Wright, University of Louisville

Mapping Low Cost and Open Source Labs to the NICE Workforce Framework

Chris Simpson, National University

Cyber Sleuthing: An Introduction to Cybersecurity Using Gamification

Curtis Coleman, Oklahoma Christian University

2:45pm

Break

3:00pm

Presentations – 20 minutes each (rooms run concurrently)

Room 1 (Chastain DE)

Session Chair: Jake Mihevc

Long and Winding Road: Navigating to a Cybersecurity Performance Based Education (PBE) Curriculum

Norma Colunga-Hernandez, Texas State Technical College in Harlingen
Amy Hertel

Program of Study Validation: Cybersecurity Concentration at FDU

Ihab Darwish, Fairleigh Dickenson University

K12-University Cybersecurity Education Partnership Best Practices

Deveeshree Nayak, University of Washington

Colorado's Cybersecurity Educational Diversity Initiative (CEDI): Urban/Rural HSIs & the Wild West

Jeffrey London, MSU Denver
Steve Beaty

Room 2 (Chastain FG)

Session Chair: Wei Li

Mininet as a Networking Tool for simulating 4 different Cyber Attacks: Experimental Results

George Meghabghab, Roane State

Computer Forensics Teaching Resources

Jeffrey Duffany, Polytechnic University of Puerto Rico
Alfredo Cruz

"A Slice of Raspberry Pi Dessert for GenCyber Teachers"

Loyce Pailen, University of Maryland Global Campus
Kimberly Mentzell

Room 3 (Chastain HIJ)

Session Chair: Tobi West

Honeypots and Knowledge Discovery in Teaching Network Defense

Ping Wang, Robert Morris University

Stepping-Stone Intrusion Detection using Crossover Packets

Lixin Wang, Columbus State University

The Applications of Internet of Things in the Medical Field

Lixin Wang, Columbus State University

4:45pm

Break

5:00pm-9:00pm

Sponsor Mixer 6th Floor (Hors d'oeuvres and Sponsors' Presentations)

CAE-CD Schedule

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8:30am	CAE Community service recognitions (8th floor Ballroom)
9:00am	Keynote (8th floor Ballroom)
9:45am	Keynote Q&A (8th floor Ballroom)
10:00am	Morning Break
10:15am	<p>Panel Presentation (8th floor Ballroom) Session Chair: Gretchen Bliss</p> <p>The “Power of Six”: Creating Cyber Experiences and Building a Diverse Talent Workforce Pathway Sharon Hamilton, Norwich University Linda Riedel, The Citadel Bryson Payne, University of North Georgia</p>
11:00am	New CAEs and New POCs Meet-and-Greet with welcome by Lynne Clark (8th floor Ballroom)

CAE-CO Schedule

Thursday, June 9, 2022

12:00pm-2:45pm	<p>CO CoP Meeting (CO POCs only) (6th floor Chastain C)</p> <p>The Cyber Operations Community of Practice will discuss the new application process, the KUs, and other topics of interest. The NSA PMO will be in attendance. This meeting is limited to CO POCs only. (Contacts: Drew Hamilton and Seth Hamman)</p>
3:00pm-4:45pm	<p>CO Designation Criteria (open to all) (6th floor Chastain C)</p> <p>The Cyber Operations designation is open for applications. During this session, we will review the designation criteria, how to know when you are ready to apply, and where to find helpful resources. There will be ample time for Q&A. Moderated by Drew Hamilton, Seth Hamman, and the NSA PMO.</p>