CAE COMMUNITY

Starts at 7:30am	Check-In	
8:00am-8:25am	Welcome, Logistics, and Roadmap Flag Ceremony Tony Coulson (CSUSB), Brian Gouker (NSA), Rodney Peterson (NIST), Dan Stein (DHS)	Century A Ballroom
8:25am-8:40am	CAE Community: Evolution and Mission Tony Coulson (CAE Community Lead)	Century A Ballroom
8:40am-10:00am	NSA/DHS: State of CAEs Brian Gouker (NSA), Daniel Stein (DHS) CAE Program Team, Corby Hovis (NSF)	Century A Ballroom
10:35am-10:50am	Morning Break (Sponsored by CyberWatch West)	
10:50am-11:55am	CAE FAST Pitch Sessions (8 Minutes Each) (See page 2 for descriptions.)	Century A Ballroom
12:00pm-1:00pm	Working Lunch: CAE Website and Signups Anastacia Webster	Century A Ballroom
1:00pm-1:30pm	KU Refinement Art Conklin	Century A Ballroom
1:30pm-2:30pm	Dismiss to Special Interest Group Sessions (4) (See page 2 for room locations and descriptions.)	Breakout Rooms
2:30pm-2:45pm	Afternoon Break (Sponsored by CyberWatch West)	
2:45pm-4:15pm	Presentations (See page 3-4 for room locations and descriptions.)	Breakout Rooms
2:45pm-4:15pm	Government Representative Appointments **DHS** – Daniel Stein (High School, Internships, Infrastructure) **NSA** – Bryan Gouker **NSA** – Heather Elkenberry (Cyber Ops) **NSF** – Corby Hovis (Grants) **NIST** – Rodney Peterson/ Bill Newhouse (NICE)	Century A Ballroom
4:20pm-5:00pm	Interactive Plenary & SIG's Work/Open Mic/ Farewell	Century A Ballroom

WIFI Access

Network (Meeting space):
WESTIN-MEETING
Passcode: NICE2016

Network(Guestrooms):
WESTIN-GUEST

Meeting Wifi

Fast Pitch Sessions

Century A Ballroom

10:50-10:58am

How do I get started in Cyber Security Competitions?

Dan Manson, Cal Poly Pomona
Cybersecurity competitions are the premier experiential learning experience today for middle school, high school and college students. Most faculty and students do not know how to get started in competitions. This talk explains in a few minutes how to get started and what the benefits are.

10:59-11:06am

SFS Community Service

Shelly Heller, George Washington University
GW CyberCorps students, under the guidance of the PIs, contact local community groups such as neighborhood associations, condominium associations and senior citizen groups to arrange a hour-long presentation and question/answer period on topics of current events in the cyber-security realm. For these audiences the intent is to explain the event "beyond the headlines", and offer generalized basic advice on how an individual could protect him or herself from many of the cyberattacks.

11:07-11:15am

Control Systems Security Curriculum Development

Guillermo Francia, III, Jacksonville State University
This fast pitch talk will describe the Faculty Development Workshop On Industrial Control Systems Security that is afforded as a professional development opportunity to college instructors and is supported by a NSF Capacity Building grant.

11:16-11:24am

Why CAEs Should Consider Hosting WiCyS

Ambareen Siraj, Tennessee Tech
The Women in Cybersecurity (WiCyS) started in 2014 with support of a National Science Foundation grant (Award#1303441) and thereafter held annually. The NSF project is managed by Tennessee Tech Cybersecurity Education Research and Outreach Center and yearly sub-awarded to a CAE institution to serve as a local host to maximize the conference exposure to many across the United States, and to bring new insights for conference organization. This 10-minute presentation will highlight 10 reasons to become a local host for WiCyS.

11:25-11:33am

National Cybersecurity Center, Colorado Springs, CO

Martin Wood, National Cybersecurity Center
National Cybersecurity Center (NCC) is a 501(c)(3) Colorado-based national center developed through a private-public partnership (P3) in Colorado Springs, Colorado. NCC will collaborate with the private sector, work with the military and federal agencies, and support and educate the public sector to better protect cities, states and national assets. NCC will be both a response partner and thought leader in cybersecurity nationally and workforce development will be critical in addressing our nation's cybersecurity efforts.

11:34-11:42am

Fostering a Strong Cybersecurity Culture in High and Middle School Students and Teachers Through a Holistic and Multidisciplinary Approach

Waleed Farag, Indiana University of PA
This presentation intends to highlight an inherently multidisciplinary approach to foster interest in cybersecurity in middle and high school students and teachers. The Information Assurance (IA) program at our University, Indiana University of Pennsylvania (IUP), has been inherently a multidisciplinary one.

11:42-11:50am

Win-Win: Assisting Companies from South Florida Mitigate Cyber-Attacks as During A Graduate Information Security

Yair Levy, Nova Southeastern University
This presentation will outline a graduate information security project capstone course at Nova Southeastern University – College of Engineering and Computing, where students are tasked to select a local small or medium company and conduct a full cybersecurity risk management analysis with proposal of a project to mitigate some of the cyber-threats observed by combining technical and managerial/governance means.

Dismiss to Special Interest Group Sessions & Presentations

1:30-2:30pm — **Undertaking the Under-Representation Problem in Cyber** — Brookside

Ambareen Siraj, Tennessee Tech
It is no secret that women and minorities are still very much under-represented in Cybersecurity. While there are various efforts underway to address this issue, a lot of work remains to be done to start the momentum shift. This open forum will provide a conversation platform to share strategies and experiences that have had a positive impact in this regard. Maybe we can all learn from each other about what works and individually take action to make a collective difference.

1:30-2:30pm — **C5 Mentor Meeting** — Shawnee

Corrine Sandee, Whatcom Community College
Meeting for C5 mentors to discuss issues and integration with the NSA mentor program.

1:30-2:30pm — **CRRC: Program Development** — Mission

Casey O'Brein, National CyberWatch Center
We would welcome feedback on what elements should be involved in the Program Development portion of the newly created/funded CRRC.

1:30-2:30pm — **Central Eastern CRRC Meeting** — Liberty

Margaret Leary, National CyberWatch Center/NVCC
An informal meeting of NSA's Central Eastern CCRC (Virginia, W. Virginia, Kentucky, Delaware, Maryland, and Tenn) institutions to discuss regional issues that the CCRC can help support. A survey for Professional Development training needs will be distributed.

Presentations

2:45-3:30pm — **Capturing Students by Capturing Flags** — Mission

Dale Rowe, Brigham Young University
We have found Capture The Flag (CTF) challenges to be an excellent tool in provoking cybersecurity interest in high-school students. We have developed a rapid prototyping platform for hosting these CTF's using LXD Linux Containers on Ubuntu 16.04 to support a variety of current and legacy CTF platforms. These allow a much faster rate of development, salability and re-use than is typically possible. At the conclusion of the presentation we will publicly release our framework.

2:45-3:10pm — **Developing an Adaptive Multi-Factor Authentication System** — Liberty

Dipankar Dasgupta, University of Memphis
This research is focused on the design and implementation of an adaptive MFA solution to regularly authenticate users through a subset of authentication factors in a time-varying operating environment (working device, connecting media and surrounding conditions). The authentication modalities/factors are chosen adaptively at every triggering event by sensing the operating environment via an optimal set of authentication factors to verify users against their claimed identities. The proposed A-MFA system has been implemented and thoroughly evaluated with different metrics to measure its performance and compare it with other existing single-factor, two-factor and multifactor-based authentication solutions.

Presentations Continued

| 2:45-3:30pm | **The National Academy of Public Administration Recommendations for SFS Programs** | Shawnee |

James Frost, Idaho State University
A paper ("Increasing the Effectiveness of the Federal Role in Cybersecurity Education.") was published in October 2015. This paper from the National Academy of Public Administration for the Center for Internet Security was prompted by the network centric nature of our world and the severe shortage of cybersecurity professionals to address cybersecurity needs. It acknowledged two programs that seek to address this shortage; the Centers of Academic Excellence and the Scholarship for Service program.

| 2:45-4:15pm | **KU Refinement** | Brookside |

Art Conklin, University of Houston
The knowledge units (KUs) are used to document the content elements in our academic programs. Academics were involved in the creation of the KUs and this refinement workshop is an opportunity to provide improvements and clarifications to the KUs. Have a KU that you think needs change, clarification, improvement? Have one you think is missing? Think there is one that doesn't belong in the list? Bring all of your thoughts and provide inputs to the next version of the KUs. This is your opportunity to help improve the KU's.

| 3:15-4:15pm | **Aligning Skills-based Training and Performance Assessments within Academia to Create a More Capable Cybersecurity Workforce** | Shawnee |

Montana Williams, Cyber World Institute
The well documented world-wide cybersecurity skills shortage has organizations desperately seeking qualified workers who have the skills to perform their functional roles. This presentation will discuss partnerships between academia, local industries, and trainers that can be integrated in post-secondary continuing education and degreed programs that can develop and enhance the requisite skills necessary to heighten cyber resiliency across the nation.

| 3:15-3:35pm | **Where's the Sense of Urgency in the Information Security Academic Community?** | Liberty |

Casey O'Brein, National CyberWatch Center
As the demand for qualified information security professionals increases, so has commercial organization's concern for the perceived lack of qualified students coming out of our programs. It's hard to imagine academia being able to solely meet the demand numbers, but what about the quality of the students coming out of our programs? If we are in fact, truly National Centers of Academic Excellence in Cyber Defense/Operations, where's the sense of urgency to right the course? This discussion will focus on areas in which academia must evolve in order to shrink the growing gap between what industry says it needs from our students and what we are actually producing.

| 3:40-4:15pm | **Cyber Security "Edutainment" - Creating Partnerships to Educate Millennials & meet the CAE/NICE Criteria** | Liberty |

Charlene Watson, Florida A & M University
"Data is the new currency," is a phrase coined by Charlene Watson and it refers to the ever increasing connectivity of data to our day to day lives. In this presentation you will find out how happenstance, chance meetings, and an openness to exchange ideas freely with free communication exchanges led to a collaboration which was mutually beneficial to the academic department, the Information Technology Department and the University as a whole. If "Data is the new currency," then open communication regarding its care may the new "Wall Street" Trade Market.