



Save the Date!

July 22-24 (Fri-Sat-Sun), 2016



**Community
College
Cyber
Summit**

Hosted by the Community College of Allegheny County

In conjunction with HI-TEC
July 25-28



Pittsburgh, Pennsylvania

Second Annual



**2015
Community
College
Cyber
Summit**

College of Southern Nevada and
JW Marriott Resort and Spa

Las Vegas, Nevada
June 17-19, 2015



Second Annual



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NATIONAL
CYBERWATCH
CENTER



CSN
COLLEGE OF
SOUTHERN NEVADA

2015 Community College Cyber Summit

Summit at a Glance

WEDNESDAY • JUNE 17		
TIME	DESCRIPTION	LOCATION
12:30 - 4:00 p.m.	Pre-Conference Tours	Bellagio, Switch Corp SUPERNAP Facility, National Atomic Testing Museum
6:00 - 9:00 p.m.	Opening Plenary <ul style="list-style-type: none"> • Call to Order • Welcome from the President of the College of Southern Nevada, Dr. Michael Richards • The New Blueprint for the Role of Community Colleges in Cybersecurity Education <ul style="list-style-type: none"> – panel presentation by Focus Area coordinators • Keynote address: Dr. David Tobey 	Valencia Ballroom/Terrace of the JW Marriott
THURSDAY • JUNE 18		
7:00 - 8:00 a.m.	Continental breakfast	Valencia Ballroom/Terrace of the JW Marriott
8:15 a.m.	Transfer from JW Marriott to the College of Southern Nevada	Buses depart from the JW Marriott Spa Tower entrance
9:00 a.m. - Noon	Thursday Morning Workshops and Presentations Sponsor/Producer Exhibits	CSN Telecom Building
Noon - 2:00 p.m.	Lunchtime Plenary <ul style="list-style-type: none"> • Buffet Lunch • Keynote address: Missy Young 	CSN Whitley Conference Center
2:00 - 5:00 p.m.	Thursday Afternoon Workshops and Presentations Sponsor/Producer Exhibits	CSN Telecom Building
5:15 - 5:45 p.m.	Bus transportation from CSN to JW Marriott	
6:30 - 7:30 p.m.	Reception	Valencia Ballroom/Terrace
FRIDAY • JUNE 19		
7:00 - 8:00 a.m.	Continental Breakfast	Valencia Ballroom/Terrace
8:10 - 8:55 a.m.	Keynote address: Haden Land	Valencia Ballroom/Terrace
9:00 a.m. - Noon	Friday Morning Workshops and Presentations	JW Marriott meeting rooms
12:15 - 12:30 p.m.	Summit wrap-up and adjournment	Valencia Ballroom/Terrace

Back cover photo by JP Diroll.
Graphic design by Candy Haun.

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Special Notes



Get the Mobile App from <http://www.Regonline.com/2015communitycollegencybersummit> or scan the QR code. The mobile app displays the Quick Locator (to find your desired presentation sessions quickly and easily), the detailed daily schedule, still-available seats for workshops, and any last minute changes and updates to the Summit Program.

Visit <http://regonline.com/2015communitycollegencybersummit> and click on the Materials tab to download 3CS presentations and link to videos of the keynote addresses. Presentation materials and videos will be available following the Summit. All Presenters: Instructions for uploading your presentation materials can be found in the same place. Thank you for doing so by the end of the Summit.

Summit Evaluation: As you attend each session, please fill out the evaluation form (the middle page of this booklet). Turn in your evaluation page before you leave for home. Thank you!



Welcome to the second annual Community College Cyber Summit (3CS), the only annual conference devoted exclusively to the role of community colleges in cybersecurity education.

National CyberWatch Center (CyberWatch), headquartered at Prince George's Community College, is the organizing force behind the creation of 3CS. We have partnered with multiple NSF ATE centers, Federal agencies, private businesses, and the College of Southern Nevada to bring about this event.

These colleges, public agencies, and private organizations understand the cybersecurity challenges facing the United States. We recognize the importance of partnerships among businesses, industry, government, and academe in addressing these challenges. We especially appreciate the critical role that community colleges must play in preparing the next generation of cybersecurity professionals and retraining the existing workforce. Community colleges paving the path forward in cybersecurity education offer robust cybersecurity academic and workforce development programs, infuse cybersecurity awareness and training across the curriculum, follow effective cybersecurity practices in their internal administrative procedures, and build partnerships with other institutions.

The Community College Cyber Summit provides an opportunity for community colleges to share what we have learned, to advance our own knowledge in this field, to build relationships within the academic community and beyond, and to expand the playing field to additional colleges.

I wish you a most successful Summit!

Dr. Charlene Dukes
President
Prince George's Community College



Welcome to the second annual Community College Cyber Summit. The College of Southern Nevada is pleased to host such an important event.

CSN is Nevada's largest and most diverse higher education institution. We offer close to 200 degree and certificate options in more than 100 areas of study, including 25 programs offered entirely online.

In many ways, the cybersecurity landscape is no different here in Nevada than other states. We, too, know the threat is real, ubiquitous, and evolving on a global level in number, sophistication, actors, and their targets, including credit cards, customer databases, personal information, the Department of Defense, the medical industry, utilities, nuclear power plants, international trade secrets, and much, much more.



We are also unique in other ways when it comes to cybersecurity. Let's consider the tourism, gaming and entertainment sector, Nevada's most important industry. The Las Vegas Strip alone has 15 of the 25 largest hotels in the world and 62,000 rooms that need to be protected.

Surveillance in every hotel and casino in Nevada requires technology and expertise uncommon elsewhere. It can include monitoring gaming operations, tracking players, facial recognition software, RFID (radio frequency identification) of monetary chips, and data mining. That doesn't include wired and wireless networking technology in virtually every hotel room on the Strip and throughout the industry. It's quite a challenge.

When it comes to cybersecurity, Nevadans have the same requirements you do. And thanks to the 3CS Planning Committee, we have more than 30 cybersecurity-related workshops arranged for you in our Morse Arberry Telecommunications building, including 20 vendor, DHS, NSA, and NSF Center of Excellence booths set up for you to visit in the Telecommunications building lobby.

We have also arranged several unique Las Vegas tours for you, including a behind-the-scenes tour of the Bellagio and tours of the National Atomic Testing Museum; SWITCH, the world's largest data center and recognized leader in ecosystem design, development, and mission-critical operations; and MGM's Corporate Command Center.

We hope you enjoy your time at CSN and in Las Vegas, but more importantly, we hope you take in critical information on cybersecurity and the ever-expanding role it plays in our daily lives.

Michael D. Richards, Ph.D.
President, College of Southern Nevada



Welcome—but first, some “thank yous”



Thanks to all of you who have made the continuation of the Community College Cyber Summit a reality.

We thank the College of Southern Nevada, host for this year’s summit at their Cheyenne Campus and at the JW Marriott Las Vegas. We thank the NSF ATE centers, the summit producers:

- National CyberWatch Center at Prince George’s Community College, Maryland
- National Resource Center for Systems Security and Information Assurance (CSSIA) at Moraine Valley Community College, Illinois
- CyberWatch West (CWW) at Whatcom Community College, Washington
- Cyber Security Education Consortium (CSEC) at Oklahoma Department of Career and Technology Education and University of Tulsa
- Advanced Cyberforensics Education Consortium (ACE) at Daytona State College, Florida
- Broadening Advanced Technological Education Connections (BATEC) at University of Massachusetts Boston
- Mid-Pacific Information and Communications Technologies Center (MPICT) at City College of San Francisco, California

We thank our three Federal agency partners: National Science Foundation (NSF), National Security Agency (NSA), and Department of Homeland Security (DHS). And we thank our industry sponsors, including (ISC)², EC-Council, Jones and Bartlett Learning, and EMC² Academic Alliance.

We are delighted to have outstanding keynote speakers, including Dr. David Tobey, Haden Lane, and Missy Young. Generous colleagues are offering you a dozen half-day workshops and about three dozen concurrent sessions designed to update your cybersecurity knowledge and better prepare your colleges in the cybersecurity arena. All await your active participation.

A special thanks goes to the 3CS Executive Steering Committee and the 3CS Program Committee.

And most of all, to all of you who are attending. You are the leaders, the pathfinders, the movers and shakers whose dedication, knowledge, and perseverance will help community colleges forge a new path in cybersecurity education, expanding it to the entire national critical infrastructure and thereby helping to keep our country safe.

Dr. Bob

Dr. Bob Spear, 3CS Chair



Thanks to the organizations that make 3CS possible!

Second Annual



2015
Community
College
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Summit

Producers



Federal Partners



Sponsors



Special thanks to our host college



And thanks also to the 3CS committees and staff!

3CS Steering Committee



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Dr. John Sands
Dr. Philip Craiger
Casey O'Brien
Corrinne Sande
Dr. Vera Zdravkovich
Dr. Sheryl Hale
Dr. Warren Hioki
Dr. James Jones
Dr. Deborah Boisvert
Lynn Dohm
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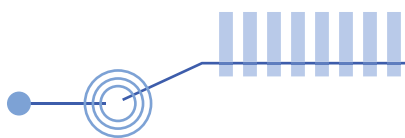
3CS Program Committee



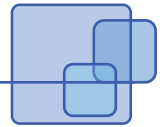
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Dr. Philip Craiger
Dr. James Jones
Dr. Ernie Friend
Dr. John Knight
Dr. Bob Spear

Staff

Fran Melvin
Teri Kepner
Ginny Swyndroski



About the Community College Cyber Summit (3CS)



The second annual Community College Cyber Summit (3CS) is organized and produced by seven Advanced Technological Education (ATE) centers funded by the National Science Foundation (NSF) and involved in cybersecurity. 3CS meets the perceived need for a national academic conference that focuses exclusively on cybersecurity education at the community college level. Faculty, administrators, and other stakeholders in community college cybersecurity education are invited and encouraged to attend.

Theme

EXPANDING THE CYBERSECURITY PLAYING FIELD:

More industries, opportunities, programs, faculty, and students.

3CS' Association with the Colloquium and with HI-TEC

2015: This year (and in all odd-numbered years), 3CS will join the Colloquium for Information Systems Security Education (the Colloquium). The cybersecurity-related ATE centers will offer Colloquium sessions that emphasize the role of community colleges, including K-12 education, articulation from high schools to community colleges to universities, and participation with universities in cybersecurity education research.

2016: 3CS takes place in even-numbered years in conjunction with the High Impact Technology Exchange Conference (HI-TEC). The association with HI-TEC allows us to focus on the role of cybersecurity in all technology fields, exemplified by the schools and programs of ATE Centers and Projects. The cybersecurity-related ATE centers will offer HI-TEC sessions intended to bring more of the ATE institutions into the cyber education arena.

The Colloquium meets in June, and features a community college track. HI-TEC meets in July, and features a cybersecurity track. What makes 3CS different? Why should someone attend? Why is this not just another typical academic conference? Here is why: In both even- and odd-numbered years, 3CS will focus on topics not typically addressed either at HI-TEC or at the Colloquium, including:

- advanced technical workshops for experienced community college faculty.
- new techniques and strategies both within and outside the classroom that community college faculty and administrators can adopt to strengthen their existing cybersecurity education courses and programs.
- new research on community college cybersecurity education.
- vendor exhibits that emphasize cybersecurity education at the community college level.

Outcome: A New Blueprint for Community College Cybersecurity Education

A principal outcome of the Community College Cyber Summit (3CS) is the creation and annual update of a new blueprint for the rapid expansion and enhancement of cybersecurity education programs at community colleges. This blueprint will be distributed to all community colleges, key Federal agencies, Congressional committees, state boards of education, associations, and businesses. The blueprint documents how far community colleges have already come in cybersecurity education, as well as the path forward and the positive role each group of stakeholders can play to insure success.

Summit Schedule and Sessions Descriptions

PRE-SUMMIT TOURS

3CS Registration and Tours Check-In—11:30 a.m.-12:30 p.m. • JW Marriott, Spa Tower Valet desk

WEDNESDAY • JUNE 17

Tour buses will pick up participants at the JW Marriott Spa Tower Valet area at 12:15 p.m., leaving the hotel by 12:30 p.m. and returning to the hotel at 3:30 p.m. Alternatively, participants can arrange their own transportation to meet the tours on location at 1:00 p.m. (see addresses below).

Behind-the-Scenes Tour of the Bellagio

The Bellagio tour will consist of slot technology, maintenance, upgrades, psychology, player tracking systems, bill validators, facial recognition technology, data mining, counterfeit bills, slot repair lab, sports book upgrade (when, why, and where), floor layout strategy, cheating, etc.

Tour capacity is 30.

**3600 Las Vegas Blvd., South
Las Vegas, NV 89109**

Switch Corporation's SUPERNAP Site Tour

The Switch tour will allow participants to see and experience one of the world's largest and most sophisticated super-secure server farms. You will see the technology that keeps thousands of client companies' IT systems protected and operational, available and secure.

Participants must download the "SUPERNAP Tour Access Agreement," sign it, scan it, and email the signed contract to Fran Melvin, National CyberWatch Center, fmelvin@pgcc.edu.

Tour capacity is 45 (in three groups of 15 people each).



**7135 S. Decatur Blvd.
Las Vegas, NV 89118**

National Atomic Testing Museum Tour

The National Atomic Testing Museum is a repository for one of the most comprehensive collections of nuclear history. As part of its mission, the National Atomic Testing Museum seeks to collect and preserve a wide variety of materials and artifacts relating to atomic testing, the Nevada Test Site, the Cold War, and nuclear and radiological science and technology. The current collection includes thousands of rare photographs, videos, artifacts, scientific and nuclear reports and data and one-of-a-kind scientist collections.

Tour capacity is 45.

**755 E. Flamingo Rd.
Las Vegas, NV 89119**

On Saturday, June 13, 3CS Attendees may also participate in the CISSE Pre-Conference back-to-back tour of "Behind the Scenes Tour of the Bellagio" (see tour description above) (10:00 a.m. to 12:00 noon), followed by a 1-hour lunch, then an afternoon "Tour of MGM Grand Corporate Command Center" (1:00 to 3:00 p.m). If you wish to participate in this day-long event on the Saturday before the Summit, please email Fran Melvin, fmelvin@pgcc.edu, to register.

Tour capacity is 30.

Summit Schedule and Sessions Descriptions

OPENING PLENARY

3CS Registration/Check-In—4:30-8:00 p.m. • JW Marriott, entrance to Valencia Ballroom/Terrace

WEDNESDAY • JUNE 17

The opening plenary takes place in the Valencia Ballroom/Terrace of the JW Marriott.

TIME	PRESENTERS	DESCRIPTION
6:00 p.m.	Dr. Bob Spear	Call to Order
6:05 p.m.	Dr. Michael Richards, President, College of Southern Nevada	Welcome to the Summit, CSN, and Las Vegas!
6:15 p.m.	Corrinne Sande	3CS Mobile App
6:30 p.m.	<p>Lead Presenter Dr. Bob Spear, 3CS Chair</p> <p>Panel The seven Focus Area Coordinators for the New Blueprint:</p> <ul style="list-style-type: none"> • Dr. Vera Zdravkovich – Focus Area: Certifications and Standards • Casey O’Brien – Curriculum • Dr. Dan Manson – Non-Curricular Program Components • Corrinne Sande – Cybersecurity for the National Critical Infrastructure • Dr. Philip Craiger – Career Preparation • Dr. Davina Pruitt-Mentle – Recruitment • Dr. Jo Portillo – Research 	<p>New Blueprint for the Role of Community Colleges in Cybersecurity Education – panel presentation and roundtable discussions</p> <p>Session Description: First, each panelist will introduce his/her focus area, identify the topics within that focus area, and discuss the status of efforts to date. Second, you will be asked to describe your institution’s involvement in community college cybersecurity education, both at present and in future.</p>
7:45 p.m.	Break	
8:00 p.m.	Dr. David Tobey	Keynote address



David Tobey

Dr. David Tobey is the Founder & CEO of VivoWorks, Inc. and the Director of Holy Cross Center, a research institute established with support from the Eli Lilly Foundation and the Judd Leighton Foundation at Holy Cross College in Notre Dame, Indiana. Holy Cross Center applies recent advances in the neuroscience of expertise to accelerate learning, increase engagement throughout the lifespan, and mitigate the cognitive declines associated with aging. Dr. Tobey leads an international consortium of researchers developing and implementing new techniques for practice-centered education (PCE). PCE uses continual assessment and experiential, scenario-based instructional designs to shorten learning curves as a solution to the growing international workforce skills crisis precipitated by the retirement of the baby boom generation.

PCE applies Dr. Tobey’s theory of human performance, the V-to-B Loop, which identifies the cognitive and neurological mechanisms that predict the transition of knowledge into skill. According to this theory, skill develops after sufficient practice leads to the formation of neural clusters deep in the unconscious that execute behavioral programs without the need to recall specific instructions or procedures—the brain’s equivalent to a software applet which Dr. Tobey labeled a thinkLet. The formation of thinkLets is detected by a new psychometric technique, Potential Performance Analysis (PPA)[™], which can assess the level and potential of skill development and predict job performance.

Prior to founding VivoWorks and establishing Holy Cross Center, Dr. Tobey was a serial entrepreneur whose companies have been listed among INC Magazine’s 500 fastest-growing private companies, set international industry standards for systems configuration and integration, and became publicly-traded companies in the early 1990s. He has also served as a consultant, officer and/or board member for private and public companies in the distribution, financial services, hospitality, information technology, life sciences, publishing, and transportation industries.



Summit Schedule and Sessions Descriptions

3CS Registration/Check-In— 6:45-8:15 a.m. • JW Marriott, entrance to Valencia Ballroom/Terrace

THURSDAY • JUNE 18

Thursday begins with breakfast, followed by bus transfer to CSN

TIME	DESCRIPTION	LOCATION
7:00 - 8:00 a.m.	Continental Breakfast	Valencia Terrace of the JW Marriott
8:00 a.m.	Announcements	
8:00 – 8:45 a.m.	Bus transfer	From the JW Marriott to the Telecom Building on the Cheyenne Campus of the College of Southern Nevada

3CS Registration/Check-In and Producer/Sponsor Exhibits—9:00 a.m.-Noon • CSN Telecom Building
 Check your email, network with colleagues—9 a.m.-noon • CSN Room 1790

MORNING CONCURRENT SESSIONS

Morning Concurrent Sessions take place in the Telecom Building of the Cheyenne Campus of the College of Southern Nevada.

TIME	DESCRIPTION	LOCATION
9:00 a.m. - Noon	Thursday Morning Workshops	
	<p><i>Android App Security Auditing: Identifying and Exploiting Vulnerabilities in Android Apps</i> Presenter: Dr. Sam Bowne, City College of San Francisco</p> <p>Android apps are very insecure. Participants will learn to test for common vulnerabilities with a few free tools: Android Studio, Genymotion, Burp, and apktool. Participants will find vulnerabilities in real apps and exploit them. We will test for insecure network transmission, insecure local storage, and insecure logging. But the most common problem is failure to verify app signatures, so that apps can be modified and Trojan code can be added. Participants will do that to a real financial app, creating a proof-of-concept that leaks out private data such as username and password.</p>	Room 1743
	<p><i>Test Drive CSSIA's New Security+ Course and Labs</i> Presenter: Tomas Koslab, Network Development Group (NDG)</p> <p>Test drive the newly released Security+ Labs using NDG's NETLAB+. With the recent retirement of the Security+ (SY0-301) exam, NDG's new lab library now covers objectives introduced in the SY0-401 exam. A new lab topology fully using open source based virtual images will also be presented. Harness the power of Linux by applying popular tools such as Splunk, Nessus, VeraCrypt, Aircrack-ng, WebGoat, and Wireshark along with the full Kali arsenal and many more. With information security education needs on the rise, the new lab library will help create a bigger knowledge footprint for aspiring students.</p>	Room 2741

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
9:00 a.m. - Noon	Thursday Morning Workshops (cont'd.)	
	<p><i>Hands-On Introduction to Cyberforensics</i> Presenter: Patrick Vilkinofsky, Advanced Cyberforensics Education Consortium (ACE)</p> <p>In this hands-on workshop we introduce participants to cyberforensics. Topics covered include demonstrations of evidence identification and handling, creating and verifying a forensic image, performing a forensic examination, and report writing. We also discuss training, education, job opportunities, and certifications. Participants will be provided materials and tools that will allow them to develop a fundamental understanding of sound cyberforensics procedures through the application of the learned procedures in hands-on exercises.</p>	Room 2743
	<p><i>Introduction to Palo Alto Advanced Firewall</i> Presenter: Lou Balek, Center for Systems Security and Information Assurance (CSSIA)</p> <p>Over the last two years the Palo Alto academic team has worked with community colleges in integrating their products into cybersecurity competitions including CCDC. Participants will gain knowledge of how the Palo Alto firewall and the Palo Alto academic partnership program work. The session will include an overview of the Palo Alto architecture, configuration, and management of a Palo Alto firewall. The session will include remote access to the Palo Alto equipment in a virtual environment. This hands-on workshop will include sample lab assignments that any college/university faculty can use once they arrive back on their campuses. Labs will start from the bottom and reach to the advanced level of forensics. There is no cost associated with using the software.</p>	Room 2753
9:15- 10:00 a.m.	Thursday Morning Presentations—Session I	
	<p><i>Developing a New Generation of Cybersecurity Professionals</i> Presenter: Mike Quissaunee, Brookdale Community College, NJ</p> <p>Responding to the growing number of cybersecurity threats and a shortage of skilled cybersecurity workers with significant hands-on skills, Brookdale Community College and Moraine Valley Community College have established the country's first Cyber Aces Academies. The Academies, each funded through two-year National Science Foundation grants and subsidized by the SANS Institute, use a competition-based model to identify talented individuals and provide them with high-level cybersecurity training and skills-building exercises. Serving as a pilot, the Academy at Brookdale has been replicated at Moraine Valley, with added innovations and a focus on the veteran population. The knowledge gained from these two projects had led to a third initiative called the VetSuccess Immersion Academy. Presenters will provide a project overview and highlight progress, best practices and lessons learned.</p>	Room 2726

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
9:15 - 10:00 a.m.	Thursday Morning Presentations—Session I (cont'd.)	
	<p><i>Adapting Graduate Courses for Critical Infrastructure Security and Resilience to Community Colleges</i> Presenters: Christie Jones, The CIP Report Center for Infrastructure Protection and Homeland Security; and Corrinne Sande, CyberWatch West</p> <p>The Center for Infrastructure Protection and Homeland Security (CIP/HS) at the George Mason University School of Law has made available a collection of comprehensive curriculum and supplemental case studies in critical infrastructure security and resilience (CISR). This session will go over the courses and solicit feedback from faculty on adapting them to community colleges.</p>	Room 2747
	<p><i>“Stop. Think. Connect” Academic Alliance: Implementing Successful Cybersecurity Awareness Campaigns</i> Presenter: Jacqueline Sullivan, Department of Homeland Security</p> <p>The Stop.Think.Connect. campaign is a national public awareness program aimed at increasing the understanding of cyber threats and empowering the American public to be safer and more secure online. Through this partnership, schools can connect with 100+ government, academic, and nonprofit institutions committed to increasing online safety, as well obtain cybersecurity tips, messaging, articles and presentations, and access to Department of Homeland Security resources, tools, and subject matter experts. This panel presentation will focus on how your school can join the Stop. Think. Connect. Academic Alliance and implement successful awareness campaigns in your schools and communities.</p>	Room 2764
<p><i>Creating 2+2 Education Pathways in Cybersecurity</i> Presenter: Beth Hawthorne, Union County College, NJ</p> <p>The vast majority of cybersecurity programs at community colleges graduate students with associate in applied science (A.A.S.) degrees. In general, A.A.S. degrees are designed to prepare students to enter the workforce immediately upon graduation. Recently, there is a growing national interest in creating 2+2 education pathways in cybersecurity. This panel presentation focuses on associate in science (A.S.) degrees designed to transfer into baccalaureate programs of study, as well as articulation agreements designed to transfer community college graduates with junior status. The following A.S. degrees and technical certificates will be presented: Secure Software Development and Technical Certificate, National CyberWatch Center, Cybersecurity Transfer-Mathematics Degree Option, Union County College, Computer Science Transfer-Secure Software Development Concentration, Middlesex Community College, and Technical Certificate-Assured Software Engineering, Software Engineering Institute, CMU.</p>	Room 2767	

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
9:15 - 10:00 a.m.	Thursday Morning Presentations—Session I (cont'd.)	
	<p><i>SSCP/CISSP: Alignment to CAE2Y KUs (GAP Academia)</i> Presenter: Dr. Jo Portillo, Manager, Global Academic Programs (ISC)²[®]</p> <p>The announcement of the NSA/DHS Center for Academic Excellence in two year colleges and the recent release of the new knowledge units (KUs) has generated widespread interest in curriculum and programs that map to these KUs. This session will review the International Information Systems Security Certification Consortium Global Academic Program (GAP). This program is designed to enhancing the cybersecurity workforce through education and industry certification. Learn how to link into (ISC)²[®] certifications and educational material through the Global Academic Program to meet the academic needs of the next generation of cybersecurity professionals. Globally recognized as the Gold Standard, (ISC)²[®] issues credentials to qualifying candidates, such as the: Certified Information Systems Security Professional (CISSP[®]), Certified Secure Software Lifecycle Professional (CSSLP[®]), and HealthCare Information Security and Privacy Practitioner (HCISPPSM). This presentation will also demonstrate how the (ISC)²[®] SSCP[®] industry certification and Common Body of Knowledge (CBK) maps to the CAE IA Knowledge Units.</p>	Room 2768
	<p><i>Orientation for Careers in Cybersecurity</i> Presenter: Dr. John Sands, Center for Systems Security and Information Assurance (CSSIA)</p> <p>The cybersecurity profession has become very specialized over the last 10 years. As a result our academic advisers face a very challenging task of educating our students about the careers in the cybersecurity field. This session will include the presentation of a new course designed to familiarize students with the many specialized careers in the cybersecurity field. The staff at CSSIA received a grant to develop a portable orientation course that can be used by your faculty. The course include five self-directed exercises in which students explore current cybersecurity related jobs, required credentials, corresponding industry certification and career pathways that lead to each of career. The course also includes a Web tool in which students can build a personalized career and academic plans.</p>	Room 2769
	<p><i>Demonstration of an Automated Mobile Digital Forensics System Using Python and Raspberry Pi</i> Presenter: Dr. Myungiae Kwak, Middle Georgia State College</p> <p>In this session, the presenters will provide a brief overview of mobile forensics trends and software tools, followed by a detailed demonstration of an Automated Mobile Digital Forensics System (AMDFS) that was developed using Python and Raspberry Pi at Middle Georgia State College. The presenters will also discuss how the tool can be used in digital forensics courses.</p>	Room 2772

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
10:15 - 11:00 a.m.	Thursday Morning Presentations—Session II	
	<p><i>Cyber Aces: Fast-Paced, High-Intensive Education Programs for Future Cybersecurity Professionals</i> Presenter: Mike Quissaunee, Brookdale Community College</p> <p>This session will introduce the Cyber Aces program and examine the success at two leading community colleges that operate a Cyber Aces Academy. The session will present two case studies: one at Brookdale Community College in New Jersey and the other at Moraine Valley Community College in Illinois. These programs have been funded by the National Science Foundation EAGER program. Learn how these colleges started programs that provide short-term fast-paced programs designed to quickly prepare small cohorts of highly motivated individuals for the cybersecurity workforce.</p>	Room 2726
	<p><i>Analyzing the Cybersecurity Labor Market</i> Presenter: Dr. Deborah Boisvert, Broadening Advanced Technological Education Connections (BATEC)</p> <p>Broadening Advanced Technological Education Connections (BATEC) has partnered with Burning Glass to analyze labor market data to scope out middle skill jobs in nine areas of computing with added emphasis in jobs in the emerging fields of big data and cybersecurity. This session will share the results and engage participants in discussions about how this can inform and impact programs within their institutions.</p>	Room 2747
	<p><i>Cybersecurity Education Concerns of the Health Care Industry</i> Moderator: Dr. Sheryl Hale, Cyber Security Education Consortium (CSEC). Panelists (all from Valley Health System of Nevada): Mark Cameron, Steve Di Bias, Ed Miller, Dominic Pangallo, Nancy Leveille, and Pamela Schaber</p> <p>The panelists will address these questions:</p> <ol style="list-style-type: none"> 1. What is the current state of cybersecurity within the health care industry? 2. Is there a shortage of training in the workforce that colleges and universities should be addressing? 3. What types of cybersecurity threats are prevalent and what countermeasures are being taken to protect what's being targeted, e.g., medical records, health delivery systems, coding systems, etc.? 4. What knowledge, skills and abilities, degrees, licensing, and certifications would you recommend for students seeking careers in health care cybersecurity? 5. What are the corresponding job titles and responsibilities of these careers? 	Room 2764
	<p><i>Introducing the New and Updated National CyberWatch Center Degree and Certificate Programs</i> Presenter: Casey O'Brien, National CyberWatch Center Co-Presenters: Chris Will, Jones & Bartlett Learning, Jim Kowatch, Pentium Labs, and Jesse Varsalone, Pentium Labs</p> <p><i>This is a double session, 10:15 a.m. - Noon.</i></p> <p>Content is king! This hands-on demonstration unveils new and updated two-year degree and certificate programs in Cyber Defense, Network Security Administration, Systems Security Administration, Network Forensics, and Secure Software Development. Participants also see a sample course cartridge to support the technical courses in these programs, including a hosted virtual lab environment, lab manual, textbook, syllabi, instructor guides, and lecture slides. If you are looking for an entire degree program for your school, wondering how to stack various certificates together, or need updated, quality cybersecurity content, this is the presentation for you.</p>	Room 2767

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
10:15 - 11:00 a.m.	Thursday Morning Presentations—Session II (cont'd.)	
	<p><i>Developing a Nationally Recognized Digital Forensics Program</i> Panelists: Vinitha Nithianandam and Patrick O'Guinn, Howard Community College; and Dawn Blanche and Ken Harris, Anne Arundel Community College</p> <p>This session provides information on building a digital forensics program that maps directly to Defense Cyber Crime Center (DC3) standards. The National Centers of Digital Forensics Academic Excellence program (CDFAE), developed by DC3, is a partnership between academia and government to establish best practices in digital forensics and increase the number of qualified professionals. Learn how achieving designation as a CDFAE institution provides students with the opportunity to be recognized for their highly desirable skill sets through the use of applied practical examinations that map to U.S. Department of Defense training credits. In this session, we will present guidelines for starting a digital forensics program, mapping courses in a digital forensics curriculum to CDFAE objectives, and applying for CDFAE designation. Learn student success stories that validate the importance of having this certificate.</p>	Room 2768
	<p><i>US Cyber Challenge: Cyber Quests Program Overview</i> Presenter: Dr. John Sands, Center for Systems Security and Information Assurance (CSSIA)</p> <p>The US Cyber Challenge "Cyber Quests" are a series of fun but challenging online competitions allowing participants to demonstrate their knowledge in a variety of information security realms. This session will present an overview of the Cyber Quest events and let you know how your students can participate. The mission of the US Cyber Challenge, which included Cyber Quest, is to connect America's best and brightest to the cybersecurity industry. Please attend this session to learn more about this fun and engaging event. The session will also introduce the Cyber Camp and Cyber Academy programs associated with the US Cyber Challenge. The session will focus on the New Jersey and Illinois events.</p>	Room 2769
	<p><i>Enhancing K-12 STEM Education Through Cybersecurity</i> Presenter: Dr. Davina Pruitt-Mentle, Educational Technology Policy Research and Outreach</p> <p>Including activities into core content, delivering an out-of-school time (OST) program or developing presentations for your community's primary and secondary schools may seem like an overwhelming task, especially for an already busy professional. However, it can be done, and it can be very rewarding for both the instructor/presenter and the attendees. This interactive and hands-on session provides skills and strategies for meaningfully integrating cybersecurity topics and activities into the subject area with Common Core State Standards, prepares attendees to use CyberSTEM content and shares several of the most popular hands-on activities that can be used for a presentation or at a career booth. Presentation tips and recommended materials will also be provided to help participants develop exciting and successful presentations that leave students and their teachers wanting more.</p>	Room 2772

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
11:15 a.m. - Noon	Thursday Morning Presentations—Session III	
	<p><i>Overview of NETLAB+ Enhancements</i> Presenter: Rich Weeks, Network Development Group (NDG)</p> <p>This session will introduce new NETLAB+ cybersecurity courses. A NETLAB+ product engineer will review the NETLAB+ product components, operations and best use practices. Multiple presenters will present several new courses with updated lab exercises. By the end of this presentation you will understand a NETLAB+ topology (pod of virtual machines), complete several lab exercises for various courses and become familiar with using NETLAB+ as a student and instructor.</p>	Room 2726
	<p><i>Creating a Cybersecurity Program That Values and Prepares Students for Industry Certifications</i> Presenter: Dave Termunde, Center for Systems Security and Information Assurance (CSSIA)</p> <p>It has been debated for years; do industry certifications really make a difference? Our team will present the facts! The session will share data that demonstrates a direct association between certifications and student success. The session will include a demonstration of the tools used by students and faculty to improve the student pass rates. The session will share initiative used to increase the number of student taking exams. Our team will demonstrate tools like MeasureUp software and lab exercises that impact student pass rates. Session will also include a brief review of how to create a private Pearson Vue testing center allowing our students and faculty the opportunity to take tests on site. Participants will take away tools to help set students up for success.</p>	Room 2747
	<p><i>Building Successful High School Dual Credit Programs</i> Co-Presenters: Ricky Moore and Bill Wolfe</p> <p>Dual credit and strong career pathways represent the health and future of quality cybersecurity programs in the community college. This session will present a nationally recognized program including the curriculum model, faculty professional development model and overall strategy of a successful program. The presenter will share many of the best practices and highlight successful marketing and promotional materials. Learn how local high school districts and their local community college work together to increase student awareness of the opportunities in the cybersecurity professions. The session will also present several student success stories.</p>	Room 2764
	<p><i>Introducing the New and Updated National CyberWatch Center Degree and Certificate Programs (continued from 10:15 a.m.)</i> See session description on page 14.</p>	Room 2767

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
11:15 a.m. - Noon	Thursday Morning Presentations—Session III (cont'd.)	
	<p><i>Benefits of Industry Partnerships to Cybersecurity Programs and Students</i> Presenter: Steve Hyzny, Governors State University</p> <p>Cybersecurity programs and students can receive resources and benefits from industry partnerships. Understanding the partnership and benefit programs can leverage the best benefits to make a stronger program and provide students with access to software, certification discounts, free training and much more. Programs can offer discounts and free certifications to students to encourage them to go beyond course materials and strive for industry certification, providing them additional skills and incentives. Partnerships can provide software at little or minimal cost to schools, allowing them to leverage funds and provide students with the software needed to study and succeed in competitions and their careers.</p>	Room 2768
	<p><i>Information Security Management Content: CASP</i> Presenter: Dr. John Sands, Center for Systems Security and Information Assurance (CSSIA)</p> <p>The session will introduce the new CompTIA Advanced Security Practitioner (CASP) certification designation for IT professionals in advanced-level security skills and knowledge. The team at CSSIA has develop course materials, student activities and assessment tools designed to prepare your students for the CompTIA CASP certification exam. The CASP exam covers the technical knowledge and skills required to design and engineer secure solutions across complex enterprise environments. The new certification includes concepts and skills required to implement effective information security management across a broad spectrum of security disciplines. The course introduces topics like risk management, strategic planning, implementation of security controls, and using information security management frameworks like ISO 27000 and PCI. The session will include a demonstration of the student activities, instructor presentation materials and assessment tools.</p>	Room 2769
<p><i>Impact of a CTE Professional Development Program on Teachers' Knowledge, Skills, and Practice</i> Presenter: Dr. Davina Pruitt-Mentle, Educational Technology Policy Research and Outreach</p> <p>In response to the need to train high school educators to effectively teach cybersecurity content, an educator professional development program supported by a National CyberWatch Center grant funded by the National Science Foundation, provided training opportunities in cyber defense labs and exercises and a CompTIA Security + course to high school teachers. This study investigated the effectiveness of NCC Cyber Security CTE Educator Academy program on improving teachers' knowledge, skills, and practice. In a broader view, the purpose was to determine the value of the academy program and to determine whether activities within the program vary in their effectiveness and to try to understand the reasons for this variation.</p>	Room 2772	

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

LUNCHTIME PLENARY (Noon - 2:00 p.m.)

TIME	DESCRIPTION	LOCATION
Noon – 2:00 p.m.	3CS Registration/Check-In	Whitley Lounge Lobby
12:15 – 1:00 p.m.	Buffet Lunch	Whitley Conference Center of the Cheyenne Campus of the College of Southern Nevada.
1:00 – 2:00 p.m.	Keynote Address: Missy Young	

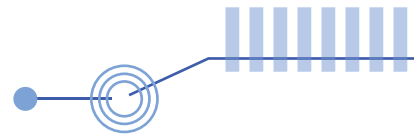


Missy Young

Missy Young is the executive vice president of colocation at SUPERNAP. She relocated to Las Vegas from Huntington Beach to join the company in 2005. As a partner at SUPERNAP, she is responsible for all sales and engineering with respect to potential clients, including solution architecture and contract negotiations. Her expertise is centered on helping clients understand the unique technology ecosystem that is SUPERNAP. She leads a phenomenal team of sales engineers and will gladly tell you that she has the best job in the world.

Prior to becoming a partner at SUPERNAP, Missy was the director of VoIP services for Mpower Communications. Her portfolio of experience also includes senior sales engineering positions at ICG Communications, IntelNet Data Centers, and FirstWorld Communications. Missy is Cisco, Microsoft, and Novell certified, and got her start in the tech field back in the dot-com days of the mid-90s as a network engineer.

Missy is dedicated to helping diversify Nevada’s economy and serving the local community through philanthropic endeavors. She serves on the IT Sector Council for the Governor’s Office of Economic Development (GOED), the Kenny Guinn Center for Policy Research Board, the Desert Research Institute Foundation Board, the Henderson Space and Science Center Board, and the Foundation Board of Opportunity Village.



Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

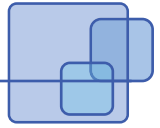
3CS Registration/Check-In and Producer/Sponsor Exhibits—2:00- 5:00 p.m. • CSN Telecom Building
 Check your email, network with colleagues—2:00- 5:00 p.m. • CSN Room 1790

AFTERNOON CONCURRENT SESSIONS

Afternoon Concurrent Sessions take place in the Telecom Building of the Cheyenne Campus of the College of Southern Nevada.

TIME	DESCRIPTION	LOCATION
2:00 - 5:00 p.m.	Thursday Afternoon Workshops	
	<p><i>Android App Security Auditing: Identifying and Exploiting Vulnerabilities in Android Apps (REPEAT)</i></p> <p>Presenter: Dr. Sam Bowne, City College of San Francisco</p> <p>Android apps are very insecure. Participants will learn to test for common vulnerabilities with a few free tools: Android Studio, Genymotion, Burp, and apktool. Participants will find vulnerabilities in real apps and exploit them. We will test for insecure network transmission, insecure local storage, and insecure logging. But the most common problem is failure to verify app signatures, so that apps can be modified and Trojan code can be added. Participants will do that to a real financial app, creating a proof-of-concept that leaks out private data such as username and password.</p>	Room 1743
	<p><i>Scripting for Cybersecurity Professionals: Demonstrating New CSSIA Labs (PowerShell)</i></p> <p>Presenter: Mike Masino, Madison Area Technical College</p> <p>With the introduction of PowerShell Microsoft opened up a whole new world of administrative automation. Along with giving systems administrators a powerful new tool, they also enabled attackers to develop a new vector for system exploitation. A basic understanding of PowerShell is quickly becoming a necessity in the information technology arena. This hands-on workshop will walk the participant through some of the basics of PowerShell scripting. The PowerShell labs used in the class are part of the new CSSIA/NDG Scripting for Cyber Security lab series. Tasks will include user and group enumeration and modification, Windows firewall manipulation and registry tweaks. Additionally network authentication and PS-Remoting will be touched on.</p>	Room 2726
	<p><i>Test Drive CSSIA's New Ethical Hacking Labs</i></p> <p>Presenter: Tomas Koslab, Network Development Group (NDG)</p> <p>NISGTC has developed Ethical Hacking labs that can be used to introduce learners to hacking concepts and techniques. This lab library was developed to introduce learners to a wide variety of vulnerabilities, techniques and methodologies used by hackers. Governments, industries and educators value security experts with knowledge in this sector. This lab library was developed 18 months ago and already requires updating. During this session we will review the lab library, complete a lab exercise, and discuss how we as an academic community can stay current, produce labs to help our learners, and create a community of educators contributing to lab libraries that are current and relevant.</p>	Room 2741
	<p><i>Open Source Digital Forensics in the Classroom</i></p> <p>Presenter: Kevin Vaccaro, Center for Systems Security and Information Assurance (CSSIA)</p> <p>Digital forensics is an ever advancing field and the costs associated with using commercial tools and equipment in the classroom are an ever increasing budget concern. Using open source and free tools, an instructor can better demonstrate to the student how commercial tools analyze evidence and why the tool creates a given output. This workshop will demonstrate various open source and free tools that can be used to teach digital forensics in the classroom.</p>	Room 2743

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

AFTERNOON CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
2:00 - 5:00 p.m.	Thursday Afternoon Workshops (cont'd.)	
	<p><i>Creating Cybersecurity Professionals with Hands-On Activities</i> Presenter: Mike Qaisaunee, Brookdale Community College Brookdale Community College and Moraine Valley Community College have established the country's first Cyber Aces Academies to develop skilled cybersecurity workers with significant hands-on skills. Critical to the success of these projects are the hands-on activities implemented at the two sites. In this workshop, we will share a variety of hands-on labs with participants, including a virtual lab environment pioneered by the CSSIA center at Moraine Valley Community College. The knowledge gained from these two projects has led to a third initiative called the VetSuccess Immersion Academy that uses labs and lessons learned from both efforts.</p>	Room 2753
2:15 - 3:00 p.m.	Thursday Afternoon Presentations—Session IV	
	<p><i>Fighting Cyber Crimes on a Global Scale: Virtual Tour of Microsoft Security Response Center</i> Presenter: Douglas Spindler, City College of San Francisco Cyber crimes are occurring on a global scale and affect all of us. To combat cyber crimes at this level, Microsoft established relationships with other tech companies and law enforcement agencies from around the world and created the Microsoft Security Response Center or MCRC. In this session you will learn about computer crimes, how cyber crimes and criminals have changed over time, and the affect and cost cyber crimes have on our society. (This is a not a highly technical talk.)</p>	Room 2747
	<p><i>Cybersecurity Education Concerns of the Health Care Industry (REPEAT)</i> Moderator: Dr. Sheryl Hale, Cyber Security Education Consortium (CSEC) Panelists (all from Valley Health System of Nevada): Mark Cameron, Steve Di Bias, Ed Miller, Dominic Pangallo, Nancy Leveille, and Pamela Schaber. The panelists will address these questions: 1. What is the current state of cybersecurity within the health care industry? 2. Is there a shortage of training in the workforce that colleges and universities should be addressing? 3. What types of cybersecurity threats are prevalent and what countermeasures are being taken to protect what's being targeted, e.g., medical records, health delivery systems, coding systems, etc.? 4. What knowledge, skills and abilities, degrees, licensing, and certifications would you recommend for students seeking a career in health care cybersecurity? 5. What are the corresponding job titles and responsibilities of these careers?</p>	Room 2764
	<p><i>Advanced Wireless Security: Review of Emerging Technologies</i> Presenter: Bill Wolfe, Center for Systems Security and Information Assurance (CSSIA) A major challenge for cybersecurity managers concerns mobile devices on the organization's wireless network. This session will examine new technologies to manage, monitor and control mobile devices. New standards like 802.11ax, 802.11ad, 802.11ah and multi-user MIMO will be introduced. Topics include emerging technologies, standards and products; cloud based management; authentication systems; secure communications; Highly Available Redundant Architecture; and guarding the organization's air space.</p>	Room 2767

2015 Community College Cyber Summit – Session Evaluations



For **each session** (tour, plenary session, workshop, or concurrent presentation) that you attended, please rate the extent with which you agree with these four statements:

Content: I learned a lot.

Expectations: This session met my expectations, based on the session title/description.

Interest: The presenter held my interest/attention.

Technical Support: Computers, Internet, and A-V equipment all worked as intended.

ID/ROOM	PRESENTER	Content	Expectations	Interest	Technical Support
Rate each statement (Content, Expectations, Interest, and Technical Support) on a 5-point Likert scale, as follows: 5=I agree wholeheartedly; 4=I agree somewhat; 3=no opinion; 2=I disagree somewhat; 1=I disagree completely.					
Tours					
T-1	Bellagio	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
T-2	Switch	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
T-3	Museum	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Plenaries					
Ple-JWM1	Spear (Wednesday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-JWM2	Tobey (Wednesday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-CSN3	Exhibits (Thursday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-CSN4	Young (Thursday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-JWM5	Reception (Thursday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-JWM6	Land (Friday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Workshops Thursday Morning					
WTM-1743	Bowne	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTM-2741	Koslab	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTM-2743	Vilkofsky	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTM-2753	Balek	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Workshops Thursday Afternoon					
WTA-1743	Bowne	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTA-2726	Masino	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTA-2741	Koslab	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTA-2743	Vaccaro	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTA-2753	Qaissaunee	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Workshops Friday Morning					
WF-CatA	Nixon	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WF-Gal	Leary	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WF-Mad	Zdravkovich	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

When completed, please remove the Evaluation Page (one sheet of paper printed on four sides) from the middle of the Summit Program, and drop it in the box at the Registration Table. If you forget and bring it home with you, please mail it to Fran Melvin, National CyberWatch Center, Room CAT-129, Prince George's Community College, 301 Largo Road, Largo, Maryland 20774. Thank You!

2015 Community College Cyber Summit – Session Evaluations



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<i>Presentations I (Thursday, 9:15 a.m.)</i>					
PI-2726	Qaissaunee	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2747	Jones & Sande	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2764	Sullivan	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2767	Hawthorne	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2768	Portillo	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2769	Sands	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2772	Kwak	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
<i>Presentations II (Thursday, 10:15 a.m.)</i>					
PII-2726	Qaissaunee	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PII-2747	Boisvert	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PII-2764	Hale	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PII-2767	O'Brien	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PII-2768	Nithianandam	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Pli-2769	Sands	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Pli-2772	Pruitt	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
<i>Presentations III (Thursday, 11:15 a.m.)</i>					
PIII-2726	Weeks	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2747	Termunde	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2764	Moore	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2768	Hyzny	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2769	Sands	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2772	Pruitt	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

2015 Community College Cyber Summit – Session Evaluations



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<i>Presentations IV (Thursday, 2:15 p.m.)</i>					
PIV-2747	Spindler	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2764	Hale	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2767	Wolfe	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2768	Hyzny	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2769	Sands	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2772	Mahoney	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
<i>Presentations V (Thursday, 4:15 p.m.)</i>					
PV-2747	Spindler	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2764	Wheeler	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2767	O'Brien & Jones	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2768	Piskopos	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2769	Bhattacharya	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2772	Mahoney	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
<i>Presentations VI (Friday, 9:15 a.m.)</i>					
PVI-Cas	Tang	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVI-CatB	Manson	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVI-GBA	Termunde	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVI-GBB	Vaccaro	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVI-Mur	Pruitt	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
<i>Presentations VII (Friday, 11:15 a.m.)</i>					
PVII-Cas	Spindler	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVII-CatB	Coppa	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVII-GBA	Termunde	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVII-GBB	Vaccaro	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVII-Mur	Hioki	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

Overall Summit Evaluation



Rate each item on a 5 point scale from 5=Excellent to 1=Poor		What I liked best about 3CS	
<i>Rating</i>			
<i>JW Marriott:</i>			
	Accommodations		
	Conference facilities		
	Food and beverages		
	Internet/tech support		
<i>CSN:</i>			
	Conference facilities		What I liked least about 3CS
	Food and beverages		
	Internet/tech support		
<i>General:</i>			
	Location (Las Vegas)		
	Holding 3CS in Conjunction with CISSE		
	Chances that I will attend 3CS in Pittsburgh in 2016		
	One Single Overall Summit Rating	Who was missing from this year's 3CS, and should be invited next year?	
The best presentation I attended was:			
<i>Day/Time</i>	<i>Presenter / Topic</i>		

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

AFTERNOON CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
2:15 - 3:00 p.m.	Thursday Afternoon Presentations—Session IV (cont'd.)	
	<p><i>How to Encourage and Promote Activities Such as Cybersecurity Teams and Interaction Among Students</i></p> <p>Presenter: Steve Hyzny, Governors State University</p> <p>Engaging student at community colleges and other commuter campuses in extracurricular activities can be a challenge. Building participation outside of the classroom is needed to encourage students to form teams and explore topics outside of the traditional classroom settings. On commuter campuses this can be a difficult task as students are not resident and must travel to campus to participate. A discussion of successes and failures among peers will allow for the sharing of successes and failures to allow learning and encourage ideas that can begin to build a stronger student participation in cybersecurity competitions.</p>	Room 2768
	<p><i>National Faculty Development Academy: Answering the Need for Faculty Development</i></p> <p>Presenter: Dr. John Sands, Center for Systems Security and Information Assurance (CSSIA)</p> <p>Over the last 12 years the Center for Systems Security and Information Assurance (CSSIA) has created a national resource for community college cybersecurity faculty development. The center serves more than 300 faculty each year with workshops and classes that include topics like digital forensics to full industry certification workshops like CISSP. The center strives to bring the best and most current courses to you throughout the year. The CSSIA staff works with the National Science Foundation (NSF) Advanced Technology Education (ATE) grant programs and industry partners to define and organize these efforts. Learn about the new opportunities available through the CSSIA National Faculty Development Academy.</p>	Room 2769
	<p><i>Project Based Learning (PBL): Students Learn to Collaborate and Leverage Resources While Solving IT Problems</i></p> <p>Presenter: Jamie Mahoney, Broadening Advanced Technological Education Connections (BATEC)</p> <p>Education today is not necessarily designed to prepare students to innovate, create, solve problems and collaborate, all skills required for success in today's 21st century workforce. The IT Problem-Solving course stems from the recognition of this gap and the desire to begin to address it. It embraces a teaching pedagogy called project-based learning, which requires students to learn or polish existing skills such as problem-solving, collaborating, resource assessment and leveraging, and synthesizing knowledge from disparate places all in an effort to solve a course problem they are presented with. Through this workshop you will explore how to leverage the problem-based learning methodology, introduce the information technology problems presented in the IT Problem-Solving course, and demonstrate tools and techniques on scaffolding problems, facilitating group work and engagement.</p>	Room 2772
3:15 - 4:00 p.m.	<p>Networking Opportunity</p> <p>Meet your colleagues in Room 1790 and all other breakout rooms.</p>	

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

AFTERNOON CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
4:15 -5:00 p.m.	Thursday Afternoon Presentations—Session V	
	<p><i>Changes in Disk Drives: Self-Encrypting Disks, Hybrid Disks, and Disk Forensics</i> Presenter: Douglas Spindler, City College of San Francisco</p> <p>Over the last five years disk technology has completely changed. Those who teach computer hardware or disk forensics will want to know about all of the new types of disk drives. In this session, you will learn about the history of hard disk technology and the evolution to our modern self-encrypting disks which have become so popular. Disk technologies discussed will include Advanced Format Disks, 512e, AF Native spinning disks, Hybrid disks, and dual hybrid disks. Also discussed will be new industry standards for disk such as data shingling, TPM 2.0, Opal, eDrive as encryption key management. The session will conclude with a discussion on disk forensics and why previous data sanitization techniques are no longer effective.</p>	Room 2747
	<p><i>Innovative Curriculum Model for Multi-Track Cybersecurity Career Pathways</i> Presenter: Andrew Wheeler</p> <p>This presentation demonstrates an innovative curriculum model that uses academic programs as well as training to support multi-track cybersecurity career pathways. Excelsior College is a private nonprofit distance learning institution located in Albany, NY.</p>	Room 2764
	<p><i>Backstage with the National Cyber League (NCL)</i> Presenters: Casey O'Brien, National CyberWatch Center, and James Jones, Mid-Pacific Information and Communications Technologies Center (MPICT)</p> <p>Now in its fourth year, the National Cyber League (NCL) has fine-tuned its powerful and proven model: provide a virtual training ground for faculty and students to develop and validate cybersecurity skills using content aligned with individual and team games that is scalable across many industry certifications, curricula, job roles, and verticals. What sets the NCL apart from other security competitions? It integrates learning objectives in all its activities to measure players' performance and produces individualized NCLScouting Reports. Come to this presentation to learn more about the NCL, its Scouting Reports, and how to get the NCL curricula into YOUR classroom.</p>	Room 2767
	<p><i>Integrating a Problem-Solving Framework Within Cybersecurity and Other IT Courses</i> Presenter: Lambros Piskopos, Wilbur Wright College, City Colleges of Chicago</p> <p>The presentation will share an approach to integrating problem-solving within cybersecurity and other IT courses based on the concept of modular key focus areas coverage that:</p> <ol style="list-style-type: none"> 1. Provides practical critical thinking, problem-solving, teamwork, presentation and communication opportunities that facilitate student development for skills that employers value 2. Creates awareness and appreciation for what cybersecurity professionals are exposed to in today's interconnected world 3. Builds the mindset that is required for future success in the cybersecurity field 4. Exposes students to information security career options that may be available to them by means of hands-on work these careers require 	Room 2768

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

AFTERNOON CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
4:15 -5:00 p.m.	Thursday Afternoon Presentations—Session V (cont'd.)	
	<p><i>High School Cybersecurity Education in Hawaii via Distance Learning and Hybrid Modalities</i> Presenter: Debasis Bhattacharya, University of Hawaii Maui College Cybersecurity is a popular topic among high school students given the recent publicity and sensational news articles that we see on a daily basis. But how does one go from pure hype and raw interest to a structured education of core cybersecurity topics among a distributed set of high schools? How does cybersecurity education seep through the fabric of high school curriculum, which is structured and rigid in its setup and delivery? This project explores an NSF ATE-sponsored project in Hawaii to disseminate cybersecurity curriculum and workforce development training to 12 local high schools using distance technology, virtual labs, remote tutors and a hybrid modality of instruction. This project is sponsored by NSF ATE grant #1204904.</p>	Room 2769
	<p><i>BHCC's Ethical Hacking Course: A Unique Approach to Ethics and Social Engineering</i> Presenter: Jamie Mahoney, Broadening Advanced Technological Education Connections (BATEC) The session will offer a hands-on look inside BHCC's new Ethical Hacking course and an analytical conversation about its unique approach to ethics and social engineering, led by the professors who created and teach the course. The assignments in the course are designed to specifically blend current technology topics and methods in moral philosophy, thus pushing students to explore their own ethics and moral values and cultivate their own ethos rather than relying on the opinions of others. Participants will play a bit of the social engineering game created for the course and engage in social engineering exercises and ethics discussions as if they were students in the course.</p>	Room 2772

EVENING ACTIVITIES

TIME	DESCRIPTION	LOCATION
5:15 p.m.	Transportation to JW Marriott—Buses load at 5:15 p.m. for the return trip to the JW Marriott	
6:00 – 7:30 p.m.	3CS Registration/Check-In	JW Marriott, entrance to Valencia Ballroom/Terrace
6:30 - 7:30 p.m.	Evening Reception	Valencia Ballroom/Terrace

Summit Schedule and Sessions Descriptions



FRIDAY • JUNE 19

All Summit sessions on Friday take place at the JW Marriott Hotel Resort and Spa.

MORNING PLENARY

TIME	DESCRIPTION	LOCATION
7:00 a.m. – Noon	3CS Registration/Check-In	JW Marriott, entrance to Valencia Ballroom/Terrace
7:00 - 8:00 a.m.	Continental Breakfast	Valencia Terrace of the JW Marriott
8:00 - 9:00 a.m.	Keynote Address: Haden Land	Valencia Ballroom



Haden A. Land

Haden Land is a certified systems architect with 30 years of professional experience across the public and private sectors. Currently, he is Vice President of Research and Technology for Lockheed Martin’s Information Systems and Global Solutions (IS&GS). He serves numerous U.S. government agencies, allied nations, and regulated commercial industries.

Mr. Land is responsible for product management and innovation of solutions supporting Defense, Intelligence, Civilian, Commercial customers, NexGen Cyber Innovation and Technology centers operations, strategic technology partnerships, STEM strategy, and technology planning for cloud computing, big data, cyber security, mobility, enterprise IT, service management and agile. He has domain knowledge within government, space, energy, law enforcement, financial, transportation, and healthcare.

Previously, he was Vice President of Engineering and CTO for Lockheed Martin IS&GS Civil and Vice President of Technical Operations and CTO/CIO for Lockheed Martin Enterprise Solutions. In addition, Land has extensive technical experience performing in many chief architect and chief engineer roles and has held a number of technical and engineering director positions. Previous employers include IBM and Loral.

Mr. Land’s applies his longstanding expertise in the engineering and technology industry to the next generation of Science, Technology, Engineering and Math (STEM) academia, leveraging his leadership roles to shape curricula for our future workforce and igniting and maintaining interest in advanced innovation. He serves as a Potsdam University Trustee, Capitol College Trustee, Prince George’s Community College Foundation Board Chairman, Hispanic Information Technology Executive Council Board Director, Cyber Maryland Advisory Board Member, MBRT STEMnet Advisory Board Member, Security Innovation Network Steering Board Member, Washington DC CIO Executive Committee Chair, Global CIO Governing Body Member and World Economic Forum Member.

Mr. Land has a bachelor’s degree in Mathematics and Computer Science from Potsdam University and a master’s degree in Computer Science from Syracuse University. He is a sought out global speaker and involved in various philanthropic initiatives. He has been selected eight times as one of the Top Hispanics in Business and Technology by Hispanic Engineer and Information Technology magazine; twice named a Most Influential Hispanic by the Hispanic Information Technology Executive Council; received the prestigious Global CIO Executive Top 10 Breakaway Leader award; received the Minerva Award for professional lifetime achievement from Potsdam University; and received an honorary doctorate degree in Humane Letters, Honoris Causa, from Capitol College.

Summit Schedule and Sessions Descriptions

FRIDAY • JUNE 19

MORNING CONCURRENT SESSIONS

Friday Morning Concurrent Sessions take place in meeting rooms of the JW Marriott.

TIME	DESCRIPTION	ROOM
9:00 a.m. - Noon	Friday Morning Workshops	
	<p><i>Smartphone Forensics</i> Presenter: Charline Nixon, Calhoun Community College Mobile devices are now used for risky activities such as purchases, social media, and emails. This course provide practical instructions and hands-on exercises on the unique sets of evidence available on Smartphones, cellphone SMS exploits, intrusion, rooting, malware, and other application vulnerabilities. This course will also cover the aspects of extracting and evaluating data from all type and technology of Smartphones.</p>	Cataluna A
	<p><i>Collaborative Curriculum Grant Committee Workshop</i> Presenter: Dr. Margaret Leary The committee will continue creating the common curriculum. (This workshop is by invitation only.)</p>	Galicia
	<p><i>Mapping and Preparing a CAE2Y Program Submission</i> Presenters: Dr. Vera Zdravkovich (lead), Dr. John Sands, Denisha Jackson To support institutions of higher education in building quality cybersecurity programs, the National Security Agency and the Department of Homeland Security jointly sponsor the National Centers of Academic Excellence in Information Assurance/Cyber Defense (IA/CD). The goal of the CAE IA/CD program is to reduce vulnerability in our national information infrastructure by promoting education and research in IA/CD and to produce a growing number of professionals with expertise in IA/CD disciplines. All accredited two-year, four-year and graduate level institutions in the United States can apply for designation as a CAE IA/CD. This session will review the CyberWatch "Guide for Mapping Courses to Knowledge Units." In addition, Vera and John will walk participants through the CAE2Y requirements and provide examples and best practices in completing the process. The session will include an examination of several recently approved applications and share tips, insight and resources.</p>	Madrid

Summit Schedule and Sessions Descriptions



FRIDAY • JUNE 19

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	ROOM
9:15 - 10:00 a.m.	Friday Morning Presentations—Session VI	
	<p><i>ACM Cybersecurity Learning Outcomes for Associate Degree IT Programs</i> Presenter: Cara Tang, Portland Community College Panelists: Elizabeth K. Hawthorne, Union County College, and Cindy S. Tucker, Bluegrass Community and Technical College</p> <p>As a standing committee of the ACM Education Board since 1991, the Committee for Computing Education in Community Colleges delivered the final version (October 2014) of its curricular guidance for associate degree Information Technology programs. Available online, the ACM Competency Model of Core Learning Outcomes and Assessment for Associate Degree Curriculum in Information Technology includes 50 core IT learning outcomes with associated assessment metrics. Of the 50 learning outcomes, seven focus on cybersecurity:</p> <ul style="list-style-type: none"> • Use a variety of practices for making end-user IT systems secure. • Differentiate between public and private data. • Differentiate among various techniques for making a computer network secure. • Demonstrate the techniques of defensive programming and secure coding. • Diagram the phases of the Secure Software *Development Lifecycle. • Modify a system to improve data confidentiality or regulatory compliance. • Summarize the security implications and risks for distributed IT systems. 	Castilla
	<p><i>Collaborating on Cybersecurity Competitions Between High School Coaches and University Partners</i> Presenter: Dr. Dan Manson, California State Polytechnic University, Pomona</p> <p>National High School Cybersecurity Competitions such as CyberPatriot, PICOCTF, and CSAW High School Forensics Competition have grown exponentially over the past several years. These competitions provide students with real-world cybersecurity skills before college, similar to high school sports preparing students for college teams. University Cybersecurity programs are now partnering with high school cybersecurity programs and teams, providing mentoring, facilities, and recruitment. In this panel, top high school faculty cybersecurity competition coaches and their university partners will discuss the value of high school cybersecurity competitions, how to get started, and how to work with university partners.</p>	Cataluna B
	<p><i>Access to the New Cyber Curriculum Department of Labor NTER Portal</i> Presenter: Dave Termunde</p> <p>The National Information, Security, and Geospatial Technologies Consortium (NISGTC) represents a group of seven colleges from around the country jointly awarded the TAACCCT Grant for their dedication to improving information technology training and to helping students transition to the workforce. As a member of the seven-college consortium, the faculty and staff at Moraine Valley Community College have created several new and updated courses that are freely available through the Department of Labor's National Training and Education Resource (NTER) portal. The session will present several security-related courses. The presenter will also share additional course materials including instructional materials, assessment tools and labs and exercises.</p>	Grand Ballroom A

Summit Schedule and Sessions Descriptions

FRIDAY • JUNE 19

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	ROOM
9:15 - 10:00 a.m.	<p align="center">Friday Morning Presentations—Session VI (cont'd.)</p> <p><i>The Art of Penetration Testing: Teaching Ethical Hacking</i> Presenter: Kevin Vaccaro, Center for Systems Security and Information Assurance (CSSIA) The art of pen-testing is getting more sophisticated as operating systems and network resources become more secure. This session will introduce some of the latest tools and techniques in performing pen-testing. Modern cyber defense requires a realistic and thorough understanding of Web application, network services test, remote access tools and hacking mobile device. The session will review the top 10 pen-testing tools. The session will also introduce an overview of undetectable backdoor tools.</p>	Grand Ballroom B
	<p><i>Strategies and Techniques to Promote Inclusion of Cybersecurity Content in the General Classroom</i> Presenter: Dr. Davina Pruitt-Mentle, Educational Technology Policy Research and Outreach This paper summarizes one of two companion studies that were designed to investigate the effectiveness of a professional development program on improving teachers' knowledge, skills, and practice toward cybersecurity topics, and fostering teachers' confidence in sharing content and activities with students in the general classroom setting. Highlights of how teachers have folded cybersecurity topics into their own content area in the general classroom setting are also shared. The study consisted of pre and post questionnaires, in-depth interviews, observations and document analysis. This presentation will provide an analysis of critical factors in the effective integration of cybersecurity topics in the general classroom and will share strategies and techniques to promote the same in your location.</p>	Murcia
10:15 - 11:00 a.m.	<p align="center">Networking Opportunity Meet your colleagues in the Valencia Ballroom/Terrace</p>	
11:15 a.m. - Noon	<p align="center">Friday Morning Presentations—Session VII</p> <p><i>Techniques to Help Students Learn, Retain Information, and Win Cyber Competitions</i> Presenter: Douglas Spindler, City College of San Francisco Every semester I watch as students struggle in my class as they try to apply what they learned in their other classes in mine. I realize we should be teaching students how to use technology to do better in their classes. I have found a collection of skills and tools (some old, some new) that are helping my students succeed in my classes and their other classes. I would like to share what I'm teaching my students to succeed. From Walking with Einstein to software, let me share with you what I found is working for my students.</p>	Castilla

Summit Schedule and Sessions Descriptions



FRIDAY • JUNE 19

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	ROOM
11:15 a.m. - Noon	Friday Morning Presentations VII (cont'd.)	
	<p><i>Techniques to Encourage Proper Communication and Professionalism in the Classroom and Beyond</i> Presenter: Dr. Emily Coppa, Advanced Cyberforensics Education Consortium (ACE)</p> <p>In today's workforce it is critical that students possess the technical skills needed to perform their jobs. However, it is equally critical that they understand how to behave within that role. By learning proper business etiquette, communication skills and professionalism, students are better prepared to land the job of their dreams. They are also more likely to keep that job. In this roundtable we will discuss ways in which staff and faculty of cyber and IT programs can teach and encourage these skills.</p>	Cataluna B
	<p><i>NISGTC Partnership: A Case Study in Building Programs Around Student Success</i> Presenter: Dave Termunde, Center for Systems Security and Information Assurance (CSSIA)</p> <p>This session will introduce the dramatic success the (National Information, Security & Geospatial Technologies Consortium) NISGTC team experienced in improving enrollment numbers, student retention and completion rates in our cybersecurity and IT programs. The panel will share best practices and many of the tools and processes to improve overall student success. The session will include hand-outs, websites and hard copies of many of the program promotional materials. The team will also present social media and electronic media that was produced and used as part of this program. Finally, the team will present some of the critical partnerships that resulted in students better prepared for the workforce. Learn how our team worked with a local IT organization in preparing students for employment skills.</p>	Grand Ballroom A
	<p><i>Using Cybersecurity-Related Websites in the Classroom</i> Presenter: Kevin Vaccaro, Center for Systems Security and Information Assurance (CSSIA)</p> <p>The field of cybersecurity and information assurance has greatly expanded over the last 10 years. This session will include a fun and interactive tour of the rich Web-based resources and websites that can be used effectively in the classroom. The session will include live Web-based tools, access to standards and frameworks as well as resources that can be used to perform risk analysis and corporate espionage. The session will also introduce Web-based tools to increase student engagement and increase experiential learning. The session will introduce more than two dozen sites you can and will use in your classroom.</p>	Grand Ballroom B
	<p><i>Student Perceptions and Experiences of 3CS</i> Moderator: Dr. Warren Hioki, College of Southern Nevada Panelists: Buddy Scott, Emilie St-Pierre, Suzy Ogyrl, Julius Erwin, Osmond Jones</p> <p>The panelists are students at the College of Southern Nevada who attended this year's Community College Cyber Summit. They will share their impressions of 3CS – what did they learn and how will this experience influence their studies and career choices.</p>	Murcia

Summit Schedule and Sessions Descriptions

FRIDAY • JUNE 19

SUMMIT WRAP-UP AND ADJOURNMENT

12:15- 12:30 p.m. • Valencia Ballroom/Terrace



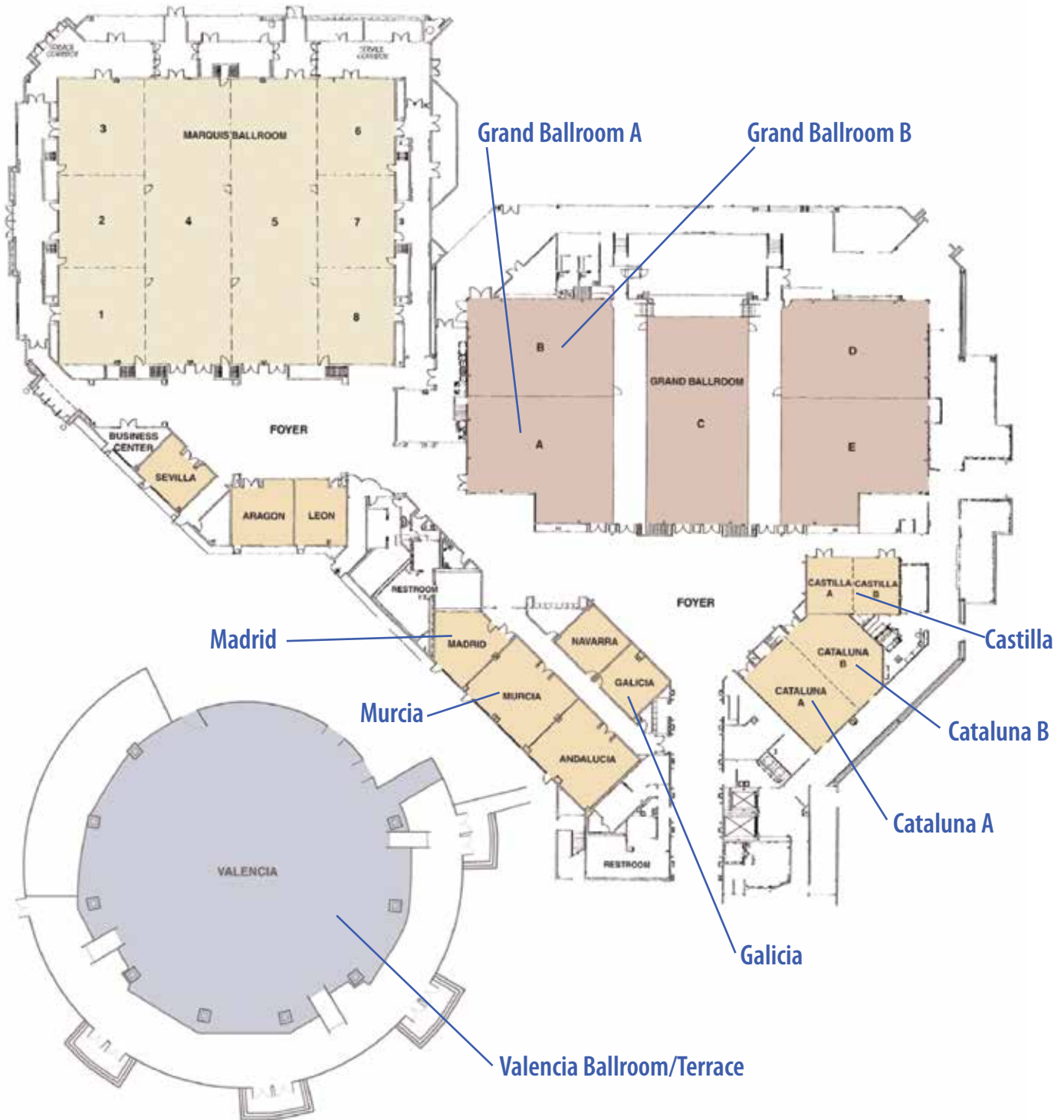
Community
College
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See you next year in Pittsburgh!





JW Marriott Conference Facilities



College of Southern Nevada Map



Cheyenne Campus

3200 E. Cheyenne
North Las Vegas, NV 89030
651-4000

MAP LEGEND

A: MORSE ARBERRY JR. TELECOMMUNICATIONS

- Level 1:
- ① Auditorium
 - ② Gallery
 - ③ English Writing Lab

B: AUTOMOTIVE

C: CULINARY

- Level 1:
- ① Russell's Restaurant
- Level 2:
- ② Herbert People Computer Lab
 - ③ International Languages
 - ④ Campus Administration

F: FINANCIAL SERVICES

- ① Receiving

E: MAIN EAST WING

- Level 1:
- ① June Whitley Lounge
 - ② Food Services
 - ③ Student Services
 - ④ Student Government
- Level 2:
- ⑤ Library

H: MAIN HORN WING

- Level 1:
- ① Horn Theater
 - ② Art Gallery
 - ③ Box Office

N: MAIN NORTH WING

- ① Health Programs Advising
- ② Back Stage Theater

S: MAIN SOUTH WING

- ① Paul Lazalt Education Center
 - ② Early Childhood Development Lab
 - ③ Planetarium
 - ④ Security
 - ⑤ Bookstore
 - ⑥ Student Life & Leadership
 - ⑦ Gymnasium
- Level 2:
- ⑧ Tutorial Services

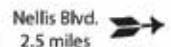
MODULARS

- M01 Child Care Center
- M02 Science Classrooms
- M03 Deaf and Hard Hearing Services
- M04 Classrooms
- M05-M06 Community College High School
- M07-M11 Facilities

O: OBSERVATORY

P: POLICE

T: TRANSPORTATION TECHNOLOGY



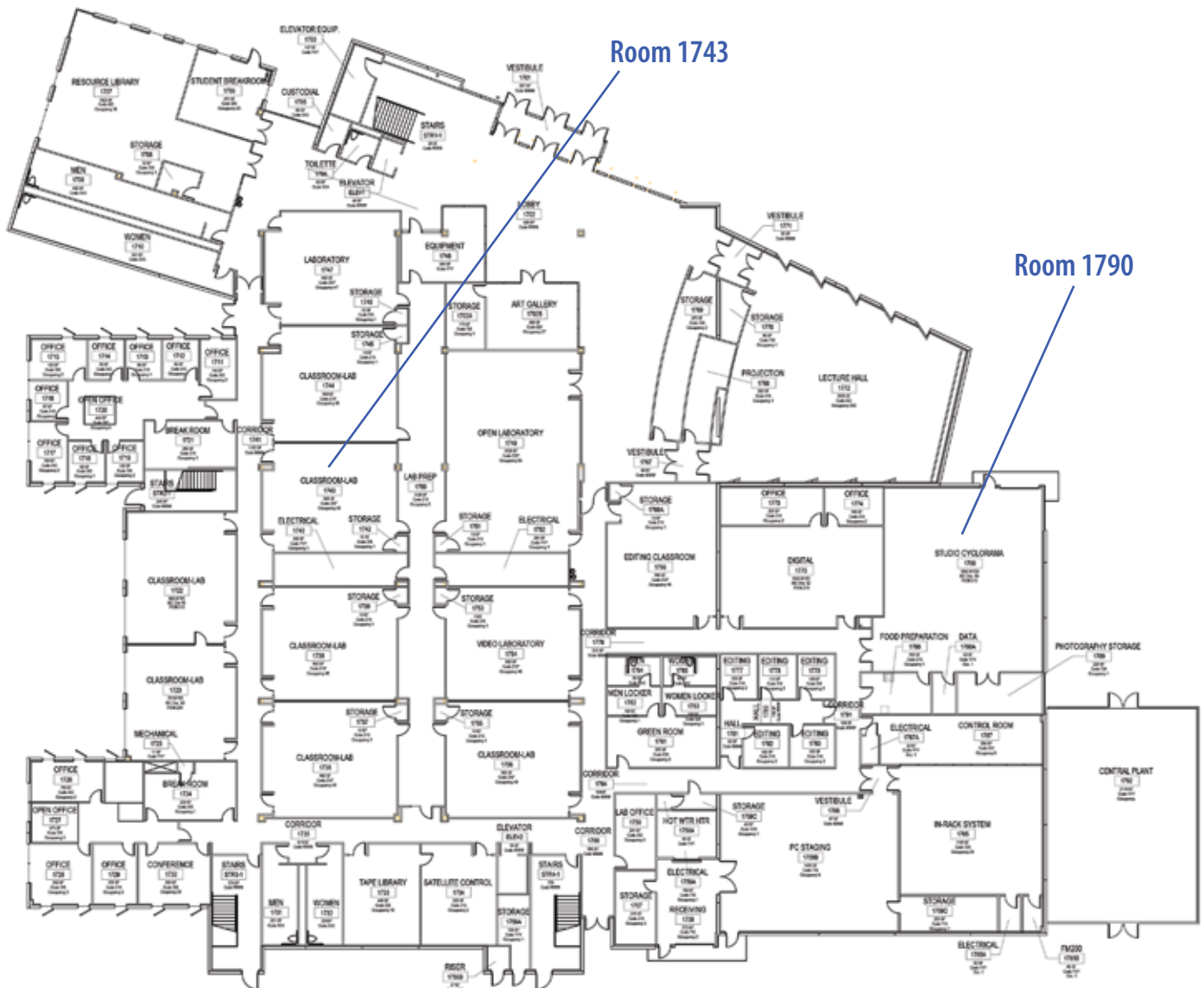
Telecom Building

E: Main East Wing – Whitley Lounge



CSN Telecom Building Map

1st Floor



Quick Locator: Room Assignments, Lead Presenters, and Short Titles

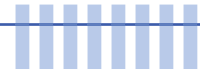
THURSDAY CONCURRENT WORKSHOPS					
	ROOM 1743	ROOM 2726	ROOM 2741	ROOM 2743	ROOM 2753
Thursday Morning Workshops 9:00 a.m.-Noon	Bowne— <i>Android App Security Auditing</i>		Koslab— <i>Test Drive CSSIA's New Security+ Course and Labs</i>	Vilkinofsky— <i>Hands-On Introduction to Cyberforensics</i>	Balek— <i>Introduction to Palo Alto Advanced Firewall</i>
Thursday Afternoon Workshops 2:00-5:00 p.m.	Bowne— <i>Android App Security Auditing (REPEAT)</i>	Masino— <i>Scripting for Cybersecurity Professionals (Power Shell)</i>	Koslab— <i>Test drive CSSIA's New Ethical Hacking Labs</i>	Vaccaro— <i>Open Source Digital Forensics in the Classroom</i>	Qaissaunee— <i>Creating Cybersecurity Professionals with Hands-On Activities</i>

THURSDAY CONCURRENT PRESENTATIONS							
	ROOM 2726	ROOM 2747	ROOM 2764	ROOM 2767	ROOM 2768	ROOM 2769	ROOM 2772
Session I 9:15-10:00 a.m.	Qaissaunee— <i>Developing a New Generation of Cybersecurity Professionals</i>	Jones and Sande— <i>Adapting Cybersecurity Graduate Courses Community Colleges</i>	Sullivan— <i>"Stop. Think. Connect" Academic Alliance</i>	Hawthorne— <i>Creating 2+2 Education Pathways in Cybersecurity</i>	Portillo— <i>SSCP/ CISSP: Alignment to CAE2Y KUs (GAP Academia)</i>	Sands— <i>Orientation for Careers in Cybersecurity</i>	Kwak— <i>Demonstration of Digital Forensics Using Python and Raspberry Pi</i>
Session II 10:15-11:00 a.m.	Qaissaunee— <i>Cyber Aces</i>	Boisvert— <i>Analyzing the Cybersecurity Labor Market</i>	Hale— <i>Cybersecurity Education Concerns of the Health Care Industry</i>	O'Brien— <i>Introducing the New National CyberWatch Center Curriculum</i>	Nithianandam— <i>Developing a Nationally Recognized Digital Forensics Program</i>	Sands— <i>US Cyber Challenge: Cyber Quests Program Overview</i>	Pruitt— <i>Enhancing K-12 STEM Education Through Cybersecurity</i>
Session III 11:15 a.m.-Noon	Weeks— <i>Overview of NETLAB+ Enhancements</i>	Termunde— <i>Preparing Students for Industry Certifications</i>	Moore— <i>Building Successful High School Dual Credit Programs</i>		Hyzny— <i>Benefits of Industry Partnerships for Programs and Students.</i>	Sands— <i>Information Security Management Content: CASP</i>	Pruitt— <i>Impact of CTE Professional Development on Teachers' KSAs</i>
Session IV 2:15-3:00 p.m.		Spindler— <i>Fighting Cyber Crimes on a Global Scale: Microsoft Security Response Center</i>	Hale— <i>Cybersecurity Education Concerns of the Health Care Industry (REPEAT)</i>	Wolfe— <i>Advanced Wireless Security: Review of Emerging Technologies</i>	Hyzny— <i>Promoting Student Cybersecurity Teams and interaction</i>	Sands— <i>National Faculty Development Academy</i>	Mahoney— <i>Project Based Learning (PBL)</i>

3:15 – 4:00 p.m.—Networking Opportunity – Meet your colleagues in Room 1790, and all other breakout rooms.

Session V 4:15-5:00 p.m.		Spindler— <i>Self-Encrypting Disks, Hybrid Disks, and Disk Forensics</i>	Wheeler— <i>Innovative Curriculum Model for Multi-Track Cybersecurity Career Pathways</i>	O'Brien & Jones— <i>Backstage with the National Cyber League (NCL)</i>	Piskopos— <i>Integrating Problem-Solving in Cybersecurity and IT Courses</i>	Bhattacharya— <i>High School Distance Learning Cybersecurity Education</i>	Mahoney— <i>BHCC's Ethical Hacking Course</i>
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Quick Locator: Room Assignments, Lead Presenters, and Short Titles



FRIDAY CONCURRENT WORKSHOPS

	CATALUNA A	GALICIA	MADRID
Friday Morning Workshops 9:00 a.m.-Noon	Nixon— <i>Smartphone Forensics</i>	Leary— <i>Collaborative Curriculum Grant Committee Workshop</i>	Zdravkovich— <i>Mapping and Preparing a CAEZY Program Submission</i>

FRIDAY CONCURRENT PRESENTATIONS

	CASTILLA	CATALUNA B	GRAND BALLROOM A	GRAND BALLROOM B	MURCIA
Session VI 9:15-10:00 a.m.	Tang— <i>ACM Cybersecurity Learning Outcomes for Associate Degree IT Programs</i>	Manson— <i>Cybersecurity Competitions Collaboration with High Schools and Universities</i>	Termunde— <i>Access to the New Cyber Curriculum Department of Labor NTER Portal</i>	Vaccaro— <i>The Art of Penetration Testing: Teaching Ethical Hacking</i>	Pruitt— <i>Strategies for Inclusion of Cybersecurity Content in the General Classroom</i>

10:15-11:00 a.m. – Networking Opportunity – Valencia Ballroom/Terrace

Session VII 11:15 a.m.-Noon	Spindler— <i>Techniques to Help Students Learn, Retain Information, and Win Cyber Completions</i>	Coppa— <i>Techniques to Encourage Proper Communication and Professionalism in the Classroom and Beyond</i>	Termunde— <i>NISGTC Partnership: A Case Study in Building Programs Around Student Success</i>	Vaccaro— <i>Using Cybersecurity-Related Websites in the Classroom</i>	Hioki & CSN Student Panel— <i>Student Perceptions and Experiences of 3CS</i>
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2015
Community
College
Cyber
Summit

Blueprint for the New and Expanded Role of Community Colleges in Cybersecurity Education



FOCUS AREAS AND TOPICS

Following is a list of the seven focus areas and topics within each focus area addressed in the Blueprint. Please circle which focus area/topic you are writing about.

Certifications and Standards

- Public Standards
 - NICE Workforce Framework
 - Knowledge Units
 - DoD 8570
 - CAE2Y
- Industry Certifications
 - Cybersecurity Certification Collaborative; certification organizations
 - Competency exams; demonstration of hands-on skills
 - Specific certs (Security+, CISSP, etc.)
- Mapping courses/curriculum to public standards (Workforce Framework, KUs, CAE2Y) and industry certifications

Curriculum

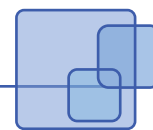
- Associate degree programs
- Certificate programs
- Stackable credentials
- Cybersecurity computer labs, servers, workstations, infrastructure
- Funding of classrooms and labs
- Faculty development:
 - Faculty participation in vendor training
 - Adjunct faculty availability
 - Faculty with necessary training and experience
- Core courses
- Specializations/Concentrations
- Online courses/labs
- 2-year school curriculum standards: Model courses and programs

Non-Curricular Components of Community College Cybersecurity Programs

- Student competitions
- Scholarships – SFS, other federal scholarships, state-sponsored, and private
- Clubs, camps, other extracurricular activities
- Commitment from high-level administrators and public officials
- Branding, promotion, and public perceptions of the community college role in cybersecurity education
- Public awareness of cybersecurity

Cybersecurity for the National Critical Infrastructure

- National Collaborative for Cyber Defense and Critical Infrastructure
- Information and communications technologies (ICT)
- Transportation (air, rail, roads, waterways)
- Critical manufacturing and industrial control systems
- Health care and public health
- Energy production and distribution (electrical, nuclear, oil and gas, other)
- Water and wastewater
- Financial systems and services
- Food and agriculture
- Public safety (police, fire, rescue)
- National defense
- Other government (non-defense, including state and local)



Career Preparation

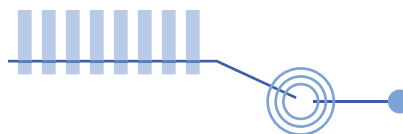
- Educational Pathways/Articulations
 - High school to community college
 - Associate degree to bachelor's degree
 - Bachelor of Applied Technology
- Career Pathways
 - Internships
 - Entry-level qualifications
 - Position descriptions
- Workforce Development
 - Nontraditional students
 - Stackable certificates
 - Veterans

Recruitment

- K-12 outreach
- High school curriculum tracks
- Support for STEM education generally
- Women and minorities in cybersecurity

Research

- Research in community college cybersecurity education
- Applied/Classroom research
- Collaboration among 2-year and 4-year institutions
- Research in workforce needs
- Evaluation of cybersecurity programs
- Data repositories
 - National CyberWatch Center Library
 - Archiving with ATE Central





Save the Date!

July 22-24 (Fri-Sat-Sun), 2016



Community
College
Cyber
Summit

Hosted by the Community College of Allegheny County

In conjunction with HI-TEC
July 25-28



Pittsburgh, Pennsylvania



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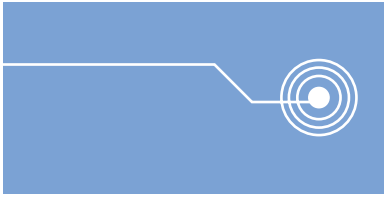
Special Notes



Get the Mobile App from <http://www.Regonline.com/2015communitycollegcybersummit> or scan the QR code. The mobile app displays the Quick Locator (to find your desired presentation sessions quickly and easily), the detailed daily schedule, still-available seats for workshops, and any last minute changes and updates to the Summit Program.

Visit <http://regonline.com/2015communitycollegcybersummit> and click on the Materials tab to download 3CS presentations and link to videos of the keynote addresses. Presentation materials and videos will be available following the Summit. All Presenters: Instructions for uploading your presentation materials can be found in the same place. Thank you for doing so by the end of the Summit.

Summit Evaluation: As you attend each session, please fill out the evaluation form (the middle page of this booklet). Turn in your evaluation page before you leave for home. Thank you!



Welcome to the second annual Community College Cyber Summit (3CS), the only annual conference devoted exclusively to the role of community colleges in cybersecurity education.

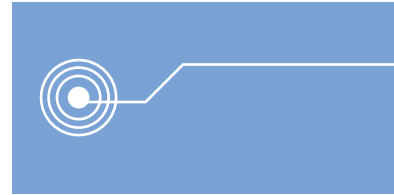
National CyberWatch Center (CyberWatch), headquartered at Prince George's Community College, is the organizing force behind the creation of 3CS. We have partnered with multiple NSF ATE centers, Federal agencies, private businesses, and the College of Southern Nevada to bring about this event.

These colleges, public agencies, and private organizations understand the cybersecurity challenges facing the United States. We recognize the importance of partnerships among businesses, industry, government, and academe in addressing these challenges. We especially appreciate the critical role that community colleges must play in preparing the next generation of cybersecurity professionals and retraining the existing workforce. Community colleges paving the path forward in cybersecurity education offer robust cybersecurity academic and workforce development programs, infuse cybersecurity awareness and training across the curriculum, follow effective cybersecurity practices in their internal administrative procedures, and build partnerships with other institutions.

The Community College Cyber Summit provides an opportunity for community colleges to share what we have learned, to advance our own knowledge in this field, to build relationships within the academic community and beyond, and to expand the playing field to additional colleges.

I wish you a most successful Summit!

Dr. Charlene Dukes
President
Prince George's Community College



Welcome to the second annual Community College Cyber Summit. The College of Southern Nevada is pleased to host such an important event.

CSN is Nevada's largest and most diverse higher education institution. We offer close to 200 degree and certificate options in more than 100 areas of study, including 25 programs offered entirely online.

In many ways, the cybersecurity landscape is no different here in Nevada than other states. We, too, know the threat is real, ubiquitous, and evolving on a global level in number, sophistication, actors, and their targets, including credit cards, customer databases, personal information, the Department of Defense, the medical industry, utilities, nuclear power plants, international trade secrets, and much, much more.



We are also unique in other ways when it comes to cybersecurity. Let's consider the tourism, gaming and entertainment sector, Nevada's most important industry. The Las Vegas Strip alone has 15 of the 25 largest hotels in the world and 62,000 rooms that need to be protected.

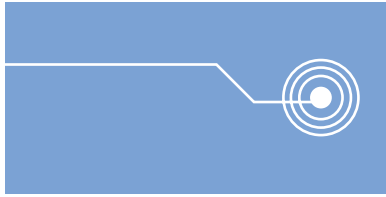
Surveillance in every hotel and casino in Nevada requires technology and expertise uncommon elsewhere. It can include monitoring gaming operations, tracking players, facial recognition software, RFID (radio frequency identification) of monetary chips, and data mining. That doesn't include wired and wireless networking technology in virtually every hotel room on the Strip and throughout the industry. It's quite a challenge.

When it comes to cybersecurity, Nevadans have the same requirements you do. And thanks to the 3CS Planning Committee, we have more than 30 cybersecurity-related workshops arranged for you in our Morse Arberry Telecommunications building, including 20 vendor, DHS, NSA, and NSF Center of Excellence booths set up for you to visit in the Telecommunications building lobby.

We have also arranged several unique Las Vegas tours for you, including a behind-the-scenes tour of the Bellagio and tours of the National Atomic Testing Museum; SWITCH, the world's largest data center and recognized leader in ecosystem design, development, and mission-critical operations; and MGM's Corporate Command Center.

We hope you enjoy your time at CSN and in Las Vegas, but more importantly, we hope you take in critical information on cybersecurity and the ever-expanding role it plays in our daily lives.

Michael D. Richards, Ph.D.
President, College of Southern Nevada



Welcome—but first, some “thank yous”



Thanks to all of you who have made the continuation of the Community College Cyber Summit a reality.

We thank the College of Southern Nevada, host for this year’s summit at their Cheyenne Campus and at the JW Marriott Las Vegas. We thank the NSF ATE centers, the summit producers:

- National CyberWatch Center at Prince George’s Community College, Maryland
- National Resource Center for Systems Security and Information Assurance (CSSIA) at Moraine Valley Community College, Illinois
- CyberWatch West (CWW) at Whatcom Community College, Washington
- Cyber Security Education Consortium (CSEC) at Oklahoma Department of Career and Technology Education and University of Tulsa
- Advanced Cyberforensics Education Consortium (ACE) at Daytona State College, Florida
- Broadening Advanced Technological Education Connections (BATEC) at University of Massachusetts Boston
- Mid-Pacific Information and Communications Technologies Center (MPICT) at City College of San Francisco, California

We thank our three Federal agency partners: National Science Foundation (NSF), National Security Agency (NSA), and Department of Homeland Security (DHS). And we thank our industry sponsors, including (ISC)², EC-Council, Jones and Bartlett Learning, and EMC² Academic Alliance.

We are delighted to have outstanding keynote speakers, including Dr. David Tobey, Haden Lane, and Missy Young. Generous colleagues are offering you a dozen half-day workshops and about three dozen concurrent sessions designed to update your cybersecurity knowledge and better prepare your colleges in the cybersecurity arena. All await your active participation.

A special thanks goes to the 3CS Executive Steering Committee and the 3CS Program Committee.

And most of all, to all of you who are attending. You are the leaders, the pathfinders, the movers and shakers whose dedication, knowledge, and perseverance will help community colleges forge a new path in cybersecurity education, expanding it to the entire national critical infrastructure and thereby helping to keep our country safe.

Dr. Bob

Dr. Bob Spear, 3CS Chair



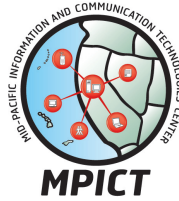
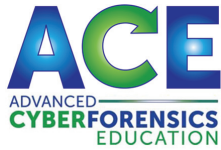
Thanks to the organizations that make 3CS possible!

Second Annual



2015
Community
College
Cyber
Summit

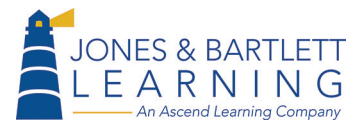
Producers



Federal Partners



Sponsors



Special thanks to our host college



And thanks also to the 3CS committees and staff!

3CS Steering Committee



Dr. Bob Spear, Chair

Dr. John Sands

Dr. Philip Craiger

Casey O'Brien

Corrinne Sande

Dr. Vera Zdravkovich

Dr. Sheryl Hale

Dr. Warren Hioki

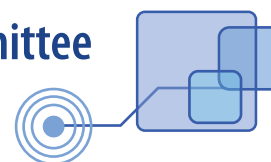
Dr. James Jones

Dr. Deborah Boisvert

Lynn Dohm

Fran Melvin

3CS Program Committee



Dr. John Sands, Chair

Dr. Philip Craiger

Dr. James Jones

Dr. Ernie Friend

Dr. John Knight

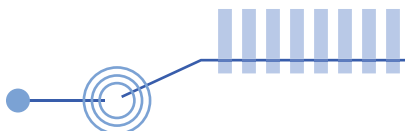
Dr. Bob Spear

Staff

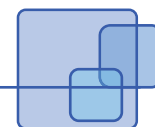
Fran Melvin

Teri Kepner

Ginny Swyndroski



About the Community College Cyber Summit (3CS)



The second annual Community College Cyber Summit (3CS) is organized and produced by seven Advanced Technological Education (ATE) centers funded by the National Science Foundation (NSF) and involved in cybersecurity. 3CS meets the perceived need for a national academic conference that focuses exclusively on cybersecurity education at the community college level. Faculty, administrators, and other stakeholders in community college cybersecurity education are invited and encouraged to attend.

Theme

EXPANDING THE CYBERSECURITY PLAYING FIELD:

More industries, opportunities, programs, faculty, and students.

3CS' Association with the Colloquium and with HI-TEC

2015: This year (and in all odd-numbered years), 3CS will join the Colloquium for Information Systems Security Education (the Colloquium). The cybersecurity-related ATE centers will offer Colloquium sessions that emphasize the role of community colleges, including K-12 education, articulation from high schools to community colleges to universities, and participation with universities in cybersecurity education research.

2016: 3CS takes place in even-numbered years in conjunction with the High Impact Technology Exchange Conference (HI-TEC). The association with HI-TEC allows us to focus on the role of cybersecurity in all technology fields, exemplified by the schools and programs of ATE Centers and Projects. The cybersecurity-related ATE centers will offer HI-TEC sessions intended to bring more of the ATE institutions into the cyber education arena.

The Colloquium meets in June, and features a community college track. HI-TEC meets in July, and features a cybersecurity track. What makes 3CS different? Why should someone attend? Why is this not just another typical academic conference? Here is why: In both even- and odd-numbered years, 3CS will focus on topics not typically addressed either at HI-TEC or at the Colloquium, including:

- advanced technical workshops for experienced community college faculty.
- new techniques and strategies both within and outside the classroom that community college faculty and administrators can adopt to strengthen their existing cybersecurity education courses and programs.
- new research on community college cybersecurity education.
- vendor exhibits that emphasize cybersecurity education at the community college level.

Outcome: A New Blueprint for Community College Cybersecurity Education

A principal outcome of the Community College Cyber Summit (3CS) is the creation and annual update of a new blueprint for the rapid expansion and enhancement of cybersecurity education programs at community colleges. This blueprint will be distributed to all community colleges, key Federal agencies, Congressional committees, state boards of education, associations, and businesses. The blueprint documents how far community colleges have already come in cybersecurity education, as well as the path forward and the positive role each group of stakeholders can play to insure success.

Summit Schedule and Sessions Descriptions

PRE-SUMMIT TOURS

3CS Registration and Tours Check-In—11:30 a.m.-12:30 p.m. • JW Marriott, Spa Tower Valet desk

WEDNESDAY • JUNE 17

Tour buses will pick up participants at the JW Marriott Spa Tower Valet area at 12:15 p.m., leaving the hotel by 12:30 p.m. and returning to the hotel at 3:30 p.m. Alternatively, participants can arrange their own transportation to meet the tours on location at 1:00 p.m. (see addresses below).

Behind-the-Scenes Tour of the Bellagio

The Bellagio tour will consist of slot technology, maintenance, upgrades, psychology, player tracking systems, bill validators, facial recognition technology, data mining, counterfeit bills, slot repair lab, sports book upgrade (when, why, and where), floor layout strategy, cheating, etc.

Tour capacity is 30.

3600 Las Vegas Blvd., South
Las Vegas, NV 89109

Switch Corporation's SUPERNAP Site Tour

The Switch tour will allow participants to see and experience one of the world's largest and most sophisticated super-secure server farms. You will see the technology that keeps thousands of client companies' IT systems protected and operational, available and secure.

Participants must download the "SUPERNAP Tour Access Agreement," sign it, scan it, and email the signed contract to Fran Melvin, National CyberWatch Center, fmelvin@pgcc.edu.

Tour capacity is 45 (in three groups of 15 people each).



7135 S. Decatur Blvd.
Las Vegas, NV 89118

National Atomic Testing Museum Tour

The National Atomic Testing Museum is a repository for one of the most comprehensive collections of nuclear history. As part of its mission, the National Atomic Testing Museum seeks to collect and preserve a wide variety of materials and artifacts relating to atomic testing, the Nevada Test Site, the Cold War, and nuclear and radiological science and technology. The current collection includes thousands of rare photographs, videos, artifacts, scientific and nuclear reports and data and one-of-a kind scientist collections.

Tour capacity is 45.

755 E. Flamingo Rd.
Las Vegas, NV 89119

On Saturday, June 13, 3CS Attendees may also participate in the CISSE Pre-Conference back-to-back tour of "Behind the Scenes Tour of the Bellagio" (see tour description above) (10:00 a.m. to 12:00 noon), followed by a 1-hour lunch, then an afternoon "Tour of MGM Grand Corporate Command Center" (1:00 to 3:00 p.m.). If you wish to participate in this day-long event on the Saturday before the Summit, please email Fran Melvin, fmelvin@pgcc.edu, to register.

Tour capacity is 30.

Summit Schedule and Sessions Descriptions

OPENING PLENARY

3CS Registration/Check-In—4:30-8:00 p.m. • JW Marriott, entrance to Valencia Ballroom/Terrace

WEDNESDAY • JUNE 17

The opening plenary takes place in the Valencia Ballroom/Terrace of the JW Marriott.

TIME	PRESENTERS	DESCRIPTION
6:00 p.m.	Dr. Bob Spear	Call to Order
6:05 p.m.	Dr. Michael Richards, President, College of Southern Nevada	Welcome to the Summit, CSN, and Las Vegas!
6:15 p.m.	Corrinne Sande	3CS Mobile App
6:30 p.m.	<p>Lead Presenter Dr. Bob Spear, 3CS Chair</p> <p>Panel The seven Focus Area Coordinators for the New Blueprint:</p> <ul style="list-style-type: none"> • Dr. Vera Zdravkovich – Focus Area: Certifications and Standards • Casey O'Brien – Curriculum • Dr. Dan Manson – Non-Curricular Program Components • Corrinne Sande – Cybersecurity for the National Critical Infrastructure • Dr. Philip Craiger – Career Preparation • Dr. Davina Pruitt-Mentle – Recruitment • Dr. Jo Portillo – Research 	<p>New Blueprint for the Role of Community Colleges in Cybersecurity Education – panel presentation and roundtable discussions</p> <p>Session Description: First, each panelist will introduce his/her focus area, identify the topics within that focus area, and discuss the status of efforts to date. Second, you will be asked to describe your institution's involvement in community college cybersecurity education, both at present and in future.</p>
7:45 p.m.	Break	
8:00 p.m.	Dr. David Tobey	Keynote address



David Tobey

Dr. David Tobey is the Founder & CEO of VivoWorks, Inc. and the Director of Holy Cross Center, a research institute established with support from the Eli Lilly Foundation and the Judd Leighton Foundation at Holy Cross College in Notre Dame, Indiana. Holy Cross Center applies recent advances in the neuroscience of expertise to accelerate learning, increase engagement throughout the lifespan, and mitigate the cognitive declines associated with aging. Dr. Tobey leads an international consortium of researchers developing and implementing new techniques for practice-centered education (PCE). PCE uses continual assessment and experiential, scenario-based instructional designs to shorten learning curves as a solution to the growing international workforce skills crisis precipitated by the retirement of the baby boom generation.

PCE applies Dr. Tobey's theory of human performance, the V-to-B Loop, which identifies the cognitive and neurological mechanisms that predict the transition of knowledge into skill. According to this theory, skill develops after sufficient practice leads to the formation of neural clusters deep in the unconscious that execute behavioral programs without the need to recall specific instructions or procedures—the brain's equivalent to a software applet which Dr. Tobey labeled a thinkLet. The formation of thinkLets is detected by a new psychometric technique, Potential Performance Analysis (PPA)[™], which can assess the level and potential of skill development and predict job performance.

Prior to founding VivoWorks and establishing Holy Cross Center, Dr. Tobey was a serial entrepreneur whose companies have been listed among INC Magazine's 500 fastest-growing private companies, set international industry standards for systems configuration and integration, and became publicly-traded companies in the early 1990s. He has also served as a consultant, officer and/or board member for private and public companies in the distribution, financial services, hospitality, information technology, life sciences, publishing, and transportation industries.



Summit Schedule and Sessions Descriptions

3CS Registration/Check-In— 6:45-8:15 a.m. • JW Marriott, entrance to Valencia Ballroom/Terrace

THURSDAY • JUNE 18

Thursday begins with breakfast, followed by bus transfer to CSN

TIME	DESCRIPTION	LOCATION
7:00 - 8:00 a.m.	Continental Breakfast	Valencia Terrace of the JW Marriott
8:00 a.m.	Announcements	
8:00 – 8:45 a.m.	Bus transfer	From the JW Marriott to the Telecom Building on the Cheyenne Campus of the College of Southern Nevada

3CS Registration/Check-In and Producer/Sponsor Exhibits—9:00 a.m.-Noon • CSN Telecom Building
 Check your email, network with colleagues—9 a.m.-noon • CSN Room 1790

MORNING CONCURRENT SESSIONS

Morning Concurrent Sessions take place in the Telecom Building of the Cheyenne Campus of the College of Southern Nevada.

TIME	DESCRIPTION	LOCATION
9:00 a.m. - Noon	Thursday Morning Workshops	
	<p><i>Android App Security Auditing: Identifying and Exploiting Vulnerabilities in Android Apps</i></p> <p>Presenter: Dr. Sam Bowne, City College of San Francisco</p> <p>Android apps are very insecure. Participants will learn to test for common vulnerabilities with a few free tools: Android Studio, Genymotion, Burp, and apktool. Participants will find vulnerabilities in real apps and exploit them. We will test for insecure network transmission, insecure local storage, and insecure logging. But the most common problem is failure to verify app signatures, so that apps can be modified and Trojan code can be added. Participants will do that to a real financial app, creating a proof-of-concept that leaks out private data such as username and password.</p>	Room 1743
	<p><i>Test Drive CSSIA's New Security+ Course and Labs</i></p> <p>Presenter: Tomas Koslab, Network Development Group (NDG)</p> <p>Test drive the newly released Security+ Labs using NDG's NETLAB+. With the recent retirement of the Security+ (SY0-301) exam, NDG's new lab library now covers objectives introduced in the SY0-401 exam. A new lab topology fully using open source based virtual images will also be presented. Harness the power of Linux by applying popular tools such as Splunk, Nessus, VeraCrypt, Aircrack-ng, WebGoat, and Wireshark along with the full Kali arsenal and many more. With information security education needs on the rise, the new lab library will help create a bigger knowledge footprint for aspiring students.</p>	Room 2741

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
9:00 a.m. - Noon	Thursday Morning Workshops (cont'd.)	
	<p><i>Hands-On Introduction to Cyberforensics</i> Presenter: Patrick Vilkinofsky, Advanced Cyberforensics Education Consortium (ACE)</p> <p>In this hands-on workshop we introduce participants to cyberforensics. Topics covered include demonstrations of evidence identification and handling, creating and verifying a forensic image, performing a forensic examination, and report writing. We also discuss training, education, job opportunities, and certifications. Participants will be provided materials and tools that will allow them to develop a fundamental understanding of sound cyberforensics procedures through the application of the learned procedures in hands-on exercises.</p>	Room 2743
	<p><i>Introduction to Palo Alto Advanced Firewall</i> Presenter: Lou Balek, Center for Systems Security and Information Assurance (CSSIA)</p> <p>Over the last two years the Palo Alto academic team has worked with community colleges in integrating their products into cybersecurity competitions including CCDC. Participants will gain knowledge of how the Palo Alto firewall and the Palo Alto academic partnership program work. The session will include an overview of the Palo Alto architecture, configuration, and management of a Palo Alto firewall. The session will include remote access to the Palo Alto equipment in a virtual environment. This hands-on workshop will include sample lab assignments that any college/university faculty can use once they arrive back on their campuses. Labs will start from the bottom and reach to the advanced level of forensics. There is no cost associated with using the software.</p>	Room 2753
9:15- 10:00 a.m.	Thursday Morning Presentations—Session I	
	<p><i>Developing a New Generation of Cybersecurity Professionals</i> Presenter: Mike Qaissaunee, Brookdale Community College, NJ</p> <p>Responding to the growing number of cybersecurity threats and a shortage of skilled cybersecurity workers with significant hands-on skills, Brookdale Community College and Moraine Valley Community College have established the country's first Cyber Aces Academies. The Academies, each funded through two-year National Science Foundation grants and subsidized by the SANS Institute, use a competition-based model to identify talented individuals and provide them with high-level cybersecurity training and skills-building exercises. Serving as a pilot, the Academy at Brookdale has been replicated at Moraine Valley, with added innovations and a focus on the veteran population. The knowledge gained from these two projects had led to a third initiative called the VetSuccess Immersion Academy. Presenters will provide a project overview and highlight progress, best practices and lessons learned.</p>	Room 2726

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
9:15 - 10:00 a.m.	Thursday Morning Presentations—Session I (cont'd.)	
	<p><i>Adapting Graduate Courses for Critical Infrastructure Security and Resilience to Community Colleges</i> Presenters: Christie Jones, The CIP Report Center for Infrastructure Protection and Homeland Security; and Corrinne Sande, CyberWatch West</p> <p>The Center for Infrastructure Protection and Homeland Security (CIP/HS) at the George Mason University School of Law has made available a collection of comprehensive curriculum and supplemental case studies in critical infrastructure security and resilience (CISR). This session will go over the courses and solicit feedback from faculty on adapting them to community colleges.</p>	Room 2747
	<p><i>“Stop. Think. Connect” Academic Alliance: Implementing Successful Cybersecurity Awareness Campaigns</i> Presenter: Jacqueline Sullivan, Department of Homeland Security</p> <p>The Stop.Think.Connect. campaign is a national public awareness program aimed at increasing the understanding of cyber threats and empowering the American public to be safer and more secure online. Through this partnership, schools can connect with 100+ government, academic, and nonprofit institutions committed to increasing online safety, as well obtain cybersecurity tips, messaging, articles and presentations, and access to Department of Homeland Security resources, tools, and subject matter experts. This panel presentation will focus on how your school can join the Stop. Think. Connect. Academic Alliance and implement successful awareness campaigns in your schools and communities.</p>	Room 2764
<p><i>Creating 2+2 Education Pathways in Cybersecurity</i> Presenter: Beth Hawthorne, Union County College, NJ</p> <p>The vast majority of cybersecurity programs at community colleges graduate students with associate in applied science (A.A.S.) degrees. In general, A.A.S. degrees are designed to prepare students to enter the workforce immediately upon graduation. Recently, there is a growing national interest in creating 2+2 education pathways in cybersecurity. This panel presentation focuses on associate in science (A.S.) degrees designed to transfer into baccalaureate programs of study, as well as articulation agreements designed to transfer community college graduates with junior status. The following A.S. degrees and technical certificates will be presented: Secure Software Development and Technical Certificate, National CyberWatch Center, Cybersecurity Transfer-Mathematics Degree Option, Union County College, Computer Science Transfer-Secure Software Development Concentration, Middlesex Community College, and Technical Certificate-Assured Software Engineering, Software Engineering Institute, CMU.</p>	Room 2767	

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
9:15 - 10:00 a.m.	Thursday Morning Presentations—Session I (cont'd.)	
	<p><i>SSCP/CISSP: Alignment to CAE2Y KUs (GAP Academia)</i> Presenter: Dr. Jo Portillo, Manager, Global Academic Programs (ISC)^{2®} The announcement of the NSA/DHS Center for Academic Excellence in two year colleges and the recent release of the new knowledge units (KUs) has generated widespread interest in curriculum and programs that map to these KUs. This session will review the International Information Systems Security Certification Consortium Global Academic Program (GAP). This program is designed to enhancing the cybersecurity workforce through education and industry certification. Learn how to link into (ISC)^{2®} certifications and educational material through the Global Academic Program to meet the academic needs of the next generation of cybersecurity professionals. Globally recognized as the Gold Standard, (ISC)^{2®} issues credentials to qualifying candidates, such as the: Certified Information Systems Security Professional (CISSP®), Certified Secure Software Lifecycle Professional (CSSLP®), and HealthCare Information Security and Privacy Practitioner (HCISPPSM). This presentation will also demonstrate how the (ISC)^{2®} SSCP® industry certification and Common Body of Knowledge (CBK) maps to the CAE IA Knowledge Units.</p>	Room 2768
	<p><i>Orientation for Careers in Cybersecurity</i> Presenter: Dr. John Sands, Center for Systems Security and Information Assurance (CSSIA) The cybersecurity profession has become very specialized over the last 10 years. As a result our academic advisers face a very challenging task of educating our students about the careers in the cybersecurity field. This session will include the presentation of a new course designed to familiarize students with the many specialized careers in the cybersecurity field. The staff at CSSIA received a grant to develop a portable orientation course that can be used by your faculty. The course include five self-directed exercises in which students explore current cybersecurity related jobs, required credentials, corresponding industry certification and career pathways that lead to each of career. The course also includes a Web tool in which students can build a personalized career and academic plans.</p>	Room 2769
	<p><i>Demonstration of an Automated Mobile Digital Forensics System Using Python and Raspberry Pi</i> Presenter: Dr. Myungiae Kwak, Middle Georgia State College In this session, the presenters will provide a brief overview of mobile forensics trends and software tools, followed by a detailed demonstration of an Automated Mobile Digital Forensics System (AMDFS) that was developed using Python and Raspberry Pi at Middle Georgia State College. The presenters will also discuss how the tool can be used in digital forensics courses.</p>	Room 2772

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
10:15 - 11:00 a.m.	Thursday Morning Presentations—Session II	
	<p><i>Cyber Aces: Fast-Paced, High-Intensive Education Programs for Future Cybersecurity Professionals</i> Presenter: Mike Qaissaanee, Brookdale Community College</p> <p>This session will introduce the Cyber Aces program and examine the success at two leading community colleges that operate a Cyber Aces Academy. The session will present two case studies: one at Brookdale Community College in New Jersey and the other at Moraine Valley Community College in Illinois. These programs have been funded by the National Science Foundation EAGER program. Learn how these colleges started programs that provide short-term fast-paced programs designed to quickly prepare small cohorts of highly motivated individuals for the cybersecurity workforce.</p>	Room 2726
	<p><i>Analyzing the Cybersecurity Labor Market</i> Presenter: Dr. Deborah Boisvert, Broadening Advanced Technological Education Connections (BATEC)</p> <p>Broadening Advanced Technological Education Connections (BATEC) has partnered with Burning Glass to analyze labor market data to scope out middle skill jobs in nine areas of computing with added emphasis in jobs in the emerging fields of big data and cybersecurity. This session will share the results and engage participants in discussions about how this can inform and impact programs within their institutions.</p>	Room 2747
	<p><i>Cybersecurity Education Concerns of the Health Care Industry</i> Moderator: Dr. Sheryl Hale, Cyber Security Education Consortium (CSEC). Panelists (all from Valley Health System of Nevada): Mark Cameron, Steve Di Bias, Ed Miller, Dominic Pangallo, Nancy Leveille, and Pamela Schaber</p> <p>The panelists will address these questions:</p> <ol style="list-style-type: none"> 1. What is the current state of cybersecurity within the health care industry? 2. Is there a shortage of training in the workforce that colleges and universities should be addressing? 3. What types of cybersecurity threats are prevalent and what countermeasures are being taken to protect what's being targeted, e.g., medical records, health delivery systems, coding systems, etc.? 4. What knowledge, skills and abilities, degrees, licensing, and certifications would you recommend for students seeking careers in health care cybersecurity? 5. What are the corresponding job titles and responsibilities of these careers? 	Room 2764
	<p><i>Introducing the New and Updated National CyberWatch Center Degree and Certificate Programs</i> Presenter: Casey O'Brien, National CyberWatch Center Co-Presenters: Chris Will, Jones & Bartlett Learning, Jim Kowatch, Pentium Labs, and Jesse Varsalone, Pentium Labs</p> <p><i>This is a double session, 10:15 a.m. - Noon.</i></p> <p>Content is king! This hands-on demonstration unveils new and updated two-year degree and certificate programs in Cyber Defense, Network Security Administration, Systems Security Administration, Network Forensics, and Secure Software Development. Participants also see a sample course cartridge to support the technical courses in these programs, including a hosted virtual lab environment, lab manual, textbook, syllabi, instructor guides, and lecture slides. If you are looking for an entire degree program for your school, wondering how to stack various certificates together, or need updated, quality cybersecurity content, this is the presentation for you.</p>	Room 2767

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
10:15 - 11:00 a.m.	Thursday Morning Presentations—Session II (cont'd.)	
	<p><i>Developing a Nationally Recognized Digital Forensics Program</i> Panelists: Vinitha Nithianandam and Patrick O'Guinn, Howard Community College; and Dawn Blanche and Ken Harris, Anne Arundel Community College</p> <p>This session provides information on building a digital forensics program that maps directly to Defense Cyber Crime Center (DC3) standards. The National Centers of Digital Forensics Academic Excellence program (CDFAE), developed by DC3, is a partnership between academia and government to establish best practices in digital forensics and increase the number of qualified professionals. Learn how achieving designation as a CDFAE institution provides students with the opportunity to be recognized for their highly desirable skill sets through the use of applied practical examinations that map to U.S. Department of Defense training credits. In this session, we will present guidelines for starting a digital forensics program, mapping courses in a digital forensics curriculum to CDFAE objectives, and applying for CDFAE designation. Learn student success stories that validate the importance of having this certificate.</p>	Room 2768
	<p><i>US Cyber Challenge: Cyber Quests Program Overview</i> Presenter: Dr. John Sands, Center for Systems Security and Information Assurance (CSSIA)</p> <p>The US Cyber Challenge "Cyber Quests" are a series of fun but challenging online competitions allowing participants to demonstrate their knowledge in a variety of information security realms. This session will present an overview of the Cyber Quest events and let you know how your students can participate. The mission of the US Cyber Challenge, which included Cyber Quest, is to connect America's best and brightest to the cybersecurity industry. Please attend this session to learn more about this fun and engaging event. The session will also introduce the Cyber Camp and Cyber Academy programs associated with the US Cyber Challenge. The session will focus on the New Jersey and Illinois events.</p>	Room 2769
	<p><i>Enhancing K-12 STEM Education Through Cybersecurity</i> Presenter: Dr. Davina Pruitt-Mentle, Educational Technology Policy Research and Outreach</p> <p>Including activities into core content, delivering an out-of-school time (OST) program or developing presentations for your community's primary and secondary schools may seem like an overwhelming task, especially for an already busy professional. However, it can be done, and it can be very rewarding for both the instructor/presenter and the attendees. This interactive and hands-on session provides skills and strategies for meaningfully integrating cybersecurity topics and activities into the subject area with Common Core State Standards, prepares attendees to use CyberSTEM content and shares several of the most popular hands-on activities that can be used for a presentation or at a career booth. Presentation tips and recommended materials will also be provided to help participants develop exciting and successful presentations that leave students and their teachers wanting more.</p>	Room 2772

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
11:15 a.m. - Noon	Thursday Morning Presentations—Session III	
	<p><i>Overview of NETLAB+ Enhancements</i> Presenter: Rich Weeks, Network Development Group (NDG)</p> <p>This session will introduce new NETLAB+ cybersecurity courses. A NETLAB+ product engineer will review the NETLAB+ product components, operations and best use practices. Multiple presenters will present several new courses with updated lab exercises. By the end of this presentation you will understand a NETLAB+ topology (pod of virtual machines), complete several lab exercises for various courses and become familiar with using NETLAB+ as a student and instructor.</p>	Room 2726
	<p><i>Creating a Cybersecurity Program That Values and Prepares Students for Industry Certifications</i> Presenter: Dave Termunde, Center for Systems Security and Information Assurance (CSSIA)</p> <p>It has been debated for years; do industry certifications really make a difference? Our team will present the facts! The session will share data that demonstrates a direct association between certifications and student success. The session will include a demonstration of the tools used by students and faculty to improve the student pass rates. The session will share initiative used to increase the number of student taking exams. Our team will demonstrate tools like MeasureUp software and lab exercises that impact student pass rates. Session will also include a brief review of how to create a private Pearson Vue testing center allowing our students and faculty the opportunity to take tests on site. Participants will take away tools to help set students up for success.</p>	Room 2747
	<p><i>Building Successful High School Dual Credit Programs</i> Co-Presenters: Ricky Moore and Bill Wolfe</p> <p>Dual credit and strong career pathways represent the health and future of quality cybersecurity programs in the community college. This session will present a nationally recognized program including the curriculum model, faculty professional development model and overall strategy of a successful program. The presenter will share many of the best practices and highlight successful marketing and promotional materials. Learn how local high school districts and their local community college work together to increase student awareness of the opportunities in the cybersecurity professions. The session will also present several student success stories.</p>	Room 2764
	<p><i>Introducing the New and Updated National CyberWatch Center Degree and Certificate Programs (continued from 10:15 a.m.)</i> See session description on page 14.</p>	Room 2767

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
11:15 a.m. - Noon	Thursday Morning Presentations—Session III (cont'd.)	
	<p><i>Benefits of Industry Partnerships to Cybersecurity Programs and Students</i> Presenter: Steve Hyzny, Governors State University</p> <p>Cybersecurity programs and students can receive resources and benefits from industry partnerships. Understanding the partnership and benefit programs can leverage the best benefits to make a stronger program and provide students with access to software, certification discounts, free training and much more. Programs can offer discounts and free certifications to students to encourage them to go beyond course materials and strive for industry certification, providing them additional skills and incentives. Partnerships can provide software at little or minimal cost to schools, allowing them to leverage funds and provide students with the software needed to study and succeed in competitions and their careers.</p>	Room 2768
	<p><i>Information Security Management Content: CASP</i> Presenter: Dr. John Sands, Center for Systems Security and Information Assurance (CSSIA)</p> <p>The session will introduce the new CompTIA Advanced Security Practitioner (CASP) certification designation for IT professionals in advanced-level security skills and knowledge. The team at CSSIA has develop course materials, student activities and assessment tools designed to prepare your students for the CompTIA CASP certification exam. The CASP exam covers the technical knowledge and skills required to design and engineer secure solutions across complex enterprise environments. The new certification includes concepts and skills required to implement effective information security management across a broad spectrum of security disciplines. The course introduces topics like risk management, strategic planning, implementation of security controls, and using information security management frameworks like ISO 27000 and PCI. The session will include a demonstration of the student activities, instructor presentation materials and assessment tools.</p>	Room 2769
<p><i>Impact of a CTE Professional Development Program on Teachers' Knowledge, Skills, and Practice</i> Presenter: Dr. Davina Pruitt-Mentle, Educational Technology Policy Research and Outreach</p> <p>In response to the need to train high school educators to effectively teach cybersecurity content, an educator professional development program supported by a National CyberWatch Center grant funded by the National Science Foundation, provided training opportunities in cyber defense labs and exercises and a CompTIA Security + course to high school teachers. This study investigated the effectiveness of NCC Cyber Security CTE Educator Academy program on improving teachers' knowledge, skills, and practice. In a broader view, the purpose was to determine the value of the academy program and to determine whether activities within the program vary in their effectiveness and to try to understand the reasons for this variation.</p>	Room 2772	

Summit Schedule and Sessions Descriptions



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LUNCHTIME PLENARY (Noon - 2:00 p.m.)

TIME	DESCRIPTION	LOCATION
Noon – 2:00 p.m.	3CS Registration/Check-In	Whitley Lounge Lobby
12:15 – 1:00 p.m.	Buffet Lunch	Whitley Conference Center of the Cheyenne Campus of the College of Southern Nevada.
1:00 – 2:00 p.m.	Keynote Address: Missy Young	



Missy Young

Missy Young is the executive vice president of colocation at SUPERNAP. She relocated to Las Vegas from Huntington Beach to join the company in 2005. As a partner at SUPERNAP, she is responsible for all sales and engineering with respect to potential clients, including solution architecture and contract negotiations. Her expertise is centered on helping clients understand the unique technology ecosystem that is SUPERNAP. She leads a phenomenal team of sales engineers and will gladly tell you that she has the best job in the world.

Prior to becoming a partner at SUPERNAP, Missy was the director of VoIP services for Mpower Communications. Her portfolio of experience also includes senior sales engineering positions at ICG Communications, IntelNet Data Centers, and FirstWorld Communications. Missy is Cisco, Microsoft, and Novell certified, and got her start in the tech field back in the dot-com days of the mid-90s as a network engineer.

Missy is dedicated to helping diversify Nevada's economy and serving the local community through philanthropic endeavors. She serves on the IT Sector Council for the Governor's Office of Economic Development (GOED), the Kenny Guinn Center for Policy Research Board, the Desert Research Institute Foundation Board, the Henderson Space and Science Center Board, and the Foundation Board of Opportunity Village.



Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

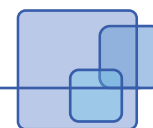
3CS Registration/Check-In and Producer/Sponsor Exhibits—2:00- 5:00 p.m. • CSN Telecom Building
 Check your email, network with colleagues—2:00- 5:00 p.m. • CSN Room 1790

AFTERNOON CONCURRENT SESSIONS

Afternoon Concurrent Sessions take place in the Telecom Building of the Cheyenne Campus of the College of Southern Nevada.

TIME	DESCRIPTION	LOCATION
2:00 - 5:00 p.m.	Thursday Afternoon Workshops	
	<p><i>Android App Security Auditing: Identifying and Exploiting Vulnerabilities in Android Apps (REPEAT)</i></p> <p>Presenter: Dr. Sam Bowne, City College of San Francisco</p> <p>Android apps are very insecure. Participants will learn to test for common vulnerabilities with a few free tools: Android Studio, Genymotion, Burp, and apktool. Participants will find vulnerabilities in real apps and exploit them. We will test for insecure network transmission, insecure local storage, and insecure logging. But the most common problem is failure to verify app signatures, so that apps can be modified and Trojan code can be added. Participants will do that to a real financial app, creating a proof-of-concept that leaks out private data such as username and password.</p>	Room 1743
	<p><i>Scripting for Cybersecurity Professionals: Demonstrating New CSSIA Labs (PowerShell)</i></p> <p>Presenter: Mike Masino, Madison Area Technical College</p> <p>With the introduction of PowerShell Microsoft opened up a whole new world of administrative automation. Along with giving systems administrators a powerful new tool, they also enabled attackers to develop a new vector for system exploitation. A basic understanding of PowerShell is quickly becoming a necessity in the information technology arena. This hands-on workshop will walk the participant through some of the basics of PowerShell scripting. The PowerShell labs used in the class are part of the new CSSIA/NDG Scripting for Cyber Security lab series. Tasks will include user and group enumeration and modification, Windows firewall manipulation and registry tweaks. Additionally network authentication and PS-Remoting will be touched on.</p>	Room 2726
	<p><i>Test Drive CSSIA's New Ethical Hacking Labs</i></p> <p>Presenter: Tomas Koslab, Network Development Group (NDG)</p> <p>NISGTC has developed Ethical Hacking labs that can be used to introduce learners to hacking concepts and techniques. This lab library was developed to introduce learners to a wide variety of vulnerabilities, techniques and methodologies used by hackers. Governments, industries and educators value security experts with knowledge in this sector. This lab library was developed 18 months ago and already requires updating. During this session we will review the lab library, complete a lab exercise, and discuss how we as an academic community can stay current, produce labs to help our learners, and create a community of educators contributing to lab libraries that are current and relevant.</p>	Room 2741
	<p><i>Open Source Digital Forensics in the Classroom</i></p> <p>Presenter: Kevin Vaccaro, Center for Systems Security and Information Assurance (CSSIA)</p> <p>Digital forensics is an ever advancing field and the costs associated with using commercial tools and equipment in the classroom are an ever increasing budget concern. Using open source and free tools, an instructor can better demonstrate to the student how commercial tools analyze evidence and why the tool creates a given output. This workshop will demonstrate various open source and free tools that can be used to teach digital forensics in the classroom.</p>	Room 2743

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

AFTERNOON CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
2:00 - 5:00 p.m.	Thursday Afternoon Workshops (cont'd.)	
	<p><i>Creating Cybersecurity Professionals with Hands-On Activities</i> Presenter: Mike Qaissaunee, Brookdale Community College Brookdale Community College and Moraine Valley Community College have established the country's first Cyber Aces Academies to develop skilled cybersecurity workers with significant hands-on skills. Critical to the success of these projects are the hands-on activities implemented at the two sites. In this workshop, we will share a variety of hands-on labs with participants, including a virtual lab environment pioneered by the CSSIA center at Moraine Valley Community College. The knowledge gained from these two projects has led to a third initiative called the VetSuccess Immersion Academy that uses labs and lessons learned from both efforts.</p>	Room 2753
2:15 - 3:00 p.m.	Thursday Afternoon Presentations—Session IV	
	<p><i>Fighting Cyber Crimes on a Global Scale: Virtual Tour of Microsoft Security Response Center</i> Presenter: Douglas Spindler, City College of San Francisco Cyber crimes are occurring on a global scale and affect all of us. To combat cyber crimes at this level, Microsoft established relationships with other tech companies and law enforcement agencies from around the world and created the Microsoft Security Response Center or MCRC. In this session you will learn about computer crimes, how cyber crimes and criminals have changed over time, and the affect and cost cyber crimes have on our society. (This is a not a highly technical talk.)</p>	Room 2747
	<p><i>Cybersecurity Education Concerns of the Health Care Industry (REPEAT)</i> Moderator: Dr. Sheryl Hale, Cyber Security Education Consortium (CSEC) Panelists (all from Valley Health System of Nevada): Mark Cameron, Steve Di Bias, Ed Miller, Dominic Pangallo, Nancy Leveille, and Pamela Schaber. The panelists will address these questions: 1. What is the current state of cybersecurity within the health care industry? 2. Is there a shortage of training in the workforce that colleges and universities should be addressing? 3. What types of cybersecurity threats are prevalent and what countermeasures are being taken to protect what's being targeted, e.g., medical records, health delivery systems, coding systems, etc.? 4. What knowledge, skills and abilities, degrees, licensing, and certifications would you recommend for students seeking a career in health care cybersecurity? 5. What are the corresponding job titles and responsibilities of these careers?</p>	Room 2764
	<p><i>Advanced Wireless Security: Review of Emerging Technologies</i> Presenter: Bill Wolfe, Center for Systems Security and Information Assurance (CSSIA) A major challenge for cybersecurity managers concerns mobile devices on the organization's wireless network. This session will examine new technologies to manage, monitor and control mobile devices. New standards like 802.11ax, 802.11ad, 802.11ah and multi-user MIMO will be introduced. Topics include emerging technologies, standards and products; cloud based management; authentication systems; secure communications; Highly Available Redundant Architecture; and guarding the organization's air space.</p>	Room 2767

2015 Community College Cyber Summit – Session Evaluations

For **each session** (tour, plenary session, workshop, or concurrent presentation) that you attended, please rate the extent with which you agree with these four statements:

Content: I learned a lot.

Expectations: This session met my expectations, based on the session title/description.

Interest: The presenter held my interest/attention.

Technical Support: Computers, Internet, and A-V equipment all worked as intended.

ID/ROOM	PRESENTER	Content	Expectations	Interest	Technical Support
Rate each statement (Content, Expectations, Interest, and Technical Support) on a 5-point Likert scale, as follows: 5=I agree wholeheartedly; 4=I agree somewhat; 3=no opinion; 2=I disagree somewhat; 1=I disagree completely.					
Tours					
T-1	Bellagio	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
T-2	Switch	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
T-3	Museum	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Plenaries					
Ple-JWM1	Spear (Wednesday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-JWM2	Tobey (Wednesday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-CSN3	Exhibits (Thursday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-CSN4	Young (Thursday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-JWM5	Reception (Thursday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Ple-JWM6	Land (Friday)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Workshops Thursday Morning					
WTM-1743	Bowne	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTM-2741	Koslab	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTM-2743	Vilkinofsky	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTM-2753	Balek	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Workshops Thursday Afternoon					
WTA-1743	Bowne	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTA-2726	Masino	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTA-2741	Koslab	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTA-2743	Vaccaro	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WTA-2753	Quissaunee	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Workshops Friday Morning					
WF-CatA	Nixon	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WF-Gal	Leary	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
WF-Mad	Zdravkovich	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

When completed, please remove the Evaluation Page (one sheet of paper printed on four sides) from the middle of the Summit Program, and drop it in the box at the Registration Table. If you forget and bring it home with you, please mail it to Fran Melvin, National CyberWatch Center, Room CAT-129, Prince George's Community College, 301 Largo Road, Largo, Maryland 20774. Thank You!

2015 Community College Cyber Summit – Session Evaluations



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Presentations I (Thursday, 9:15 a.m.)					
PI-2726	Qaissaunee	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2747	Jones & Sande	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2764	Sullivan	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2767	Hawthorne	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2768	Portillo	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Pi-2769	Sands	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PI-2772	Kwak	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Presentations II (Thursday, 10:15 a.m.)					
PII-2726	Qaissaunee	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PII-2747	Boisvert	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PII-2764	Hale	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PII-2767	O'Brien	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PII-2768	Nithianandam	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Pli-2769	Sands	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PII-2772	Pruitt	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Presentations III (Thursday, 11:15 a.m.)					
PIII-2726	Weeks	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2747	Termunde	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2764	Moore	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2768	Hyzny	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2769	Sands	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIII-2772	Pruitt	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

2015 Community College Cyber Summit – Session Evaluations

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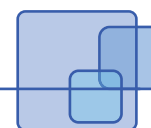
ID/ROOM	PRESENTER	Content	Expectations	Interest	Technical Support
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Presentations IV (Thursday, 2:15 p.m.)					
PIV-2747	Spindler	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2764	Hale	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2767	Wolfe	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2768	Hyzny	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2769	Sands	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PIV-2772	Mahoney	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Presentations V (Thursday, 4:15 p.m.)					
PV-2747	Spindler	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2764	Wheeler	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2767	O'Brien & Jones	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2768	Piskopos	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2769	Bhattacharya	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PV-2772	Mahoney	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Presentations VI (Friday, 9:15 a.m.)					
PVI-Cas	Tang	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVI-CatB	Manson	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVI-GBA	Termunde	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVI-GBB	Vaccaro	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVI-Mur	Pruitt	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Presentations VII (Friday, 11:15 a.m.)					
PVII-Cas	Spindler	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVII-CatB	Coppa	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVII-GBA	Termunde	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVII-GBB	Vaccaro	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
PVII-Mur	Hioki	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

Overall Summit Evaluation



Rate each item on a 5 point scale from 5=Excellent to 1=Poor		What I liked best about 3CS
<i>Rating</i>		
<i>JW Marriott:</i>		
	Accommodations	
	Conference facilities	
	Food and beverages	
	Internet/tech support	
<i>CSN:</i>		
	Conference facilities	What I liked least about 3CS
	Food and beverages	
	Internet/tech support	
<i>General:</i>		
	Location (Las Vegas)	
	Holding 3CS in Conjunction with CISSE	
	Chances that I will attend 3CS in Pittsburgh in 2016	
	One Single Overall Summit Rating	Who was missing from this year's 3CS, and should be invited next year?
The best presentation I attended was:		
<i>Day/Time</i>	<i>Presenter / Topic</i>	

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

AFTERNOON CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
2:15 - 3:00 p.m.	Thursday Afternoon Presentations—Session IV (cont'd.)	
	<p><i>How to Encourage and Promote Activities Such as Cybersecurity Teams and Interaction Among Students</i></p> <p>Presenter: Steve Hyzny, Governors State University</p> <p>Engaging student at community colleges and other commuter campuses in extracurricular activities can be a challenge. Building participation outside of the classroom is needed to encourage students to form teams and explore topics outside of the traditional classroom settings. On commuter campuses this can be a difficult task as students are not resident and must travel to campus to participate. A discussion of successes and failures among peers will allow for the sharing of successes and failures to allow learning and encourage ideas that can begin to build a stronger student participation in cybersecurity competitions.</p>	Room 2768
	<p><i>National Faculty Development Academy: Answering the Need for Faculty Development</i></p> <p>Presenter: Dr. John Sands, Center for Systems Security and Information Assurance (CSSIA)</p> <p>Over the last 12 years the Center for Systems Security and Information Assurance (CSSIA) has created a national resource for community college cybersecurity faculty development. The center serves more than 300 faculty each year with workshops and classes that include topics like digital forensics to full industry certification workshops like CISSP. The center strives to bring the best and most current courses to you throughout the year. The CSSIA staff works with the National Science Foundation (NSF) Advanced Technology Education (ATE) grant programs and industry partners to define and organize these efforts. Learn about the new opportunities available through the CSSIA National Faculty Development Academy.</p>	Room 2769
	<p><i>Project Based Learning (PBL): Students Learn to Collaborate and Leverage Resources While Solving IT Problems</i></p> <p>Presenter: Jamie Mahoney, Broadening Advanced Technological Education Connections (BATEC)</p> <p>Education today is not necessarily designed to prepare students to innovate, create, solve problems and collaborate, all skills required for success in today's 21st century workforce. The IT Problem-Solving course stems from the recognition of this gap and the desire to begin to address it. It embraces a teaching pedagogy called project-based learning, which requires students to learn or polish existing skills such as problem-solving, collaborating, resource assessment and leveraging, and synthesizing knowledge from disparate places all in an effort to solve a course problem they are presented with. Through this workshop you will explore how to leverage the problem-based learning methodology, introduce the information technology problems presented in the IT Problem-Solving course, and demonstrate tools and techniques on scaffolding problems, facilitating group work and engagement.</p>	Room 2772
3:15 - 4:00 p.m.	<p>Networking Opportunity</p> <p>Meet your colleagues in Room 1790 and all other breakout rooms.</p>	

Summit Schedule and Sessions Descriptions



THURSDAY • JUNE 18

AFTERNOON CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
4:15 -5:00 p.m.	Thursday Afternoon Presentations—Session V	
	<p><i>Changes in Disk Drives: Self-Encrypting Disks, Hybrid Disks, and Disk Forensics</i> Presenter: Douglas Spindler, City College of San Francisco</p> <p>Over the last five years disk technology has completely changed. Those who teach computer hardware or disk forensics will want to know about all of the new types of disk drives. In this session, you will learn about the history of hard disk technology and the evolution to our modern self-encrypting disks which have become so popular. Disk technologies discussed will include Advanced Format Disks, 512e, AF Native spinning disks, Hybrid disks, and dual hybrid disks. Also discussed will be new industry standards for disk such as data shingling, TPM 2.0, Opal, eDrive as encryption key management. The session will conclude with a discussion on disk forensics and why previous data sanitization techniques are no longer effective.</p>	Room 2747
	<p><i>Innovative Curriculum Model for Multi-Track Cybersecurity Career Pathways</i> Presenter: Andrew Wheeler</p> <p>This presentation demonstrates an innovative curriculum model that uses academic programs as well as training to support multi-track cybersecurity career pathways. Excelsior College is a private nonprofit distance learning institution located in Albany, NY.</p>	Room 2764
	<p><i>Backstage with the National Cyber League (NCL)</i> Presenters: Casey O'Brien, National CyberWatch Center, and James Jones, Mid-Pacific Information and Communications Technologies Center (MPICT)</p> <p>Now in its fourth year, the National Cyber League (NCL) has fine-tuned its powerful and proven model: provide a virtual training ground for faculty and students to develop and validate cybersecurity skills using content aligned with individual and team games that is scalable across many industry certifications, curricula, job roles, and verticals. What sets the NCL apart from other security competitions? It integrates learning objectives in all its activities to measure players' performance and produces individualized NCLScouting Reports. Come to this presentation to learn more about the NCL, its Scouting Reports, and how to get the NCL curricula into YOUR classroom.</p>	Room 2767
	<p><i>Integrating a Problem-Solving Framework Within Cybersecurity and Other IT Courses</i> Presenter: Lambros Piskopos, Wilbur Wright College, City Colleges of Chicago</p> <p>The presentation will share an approach to integrating problem-solving within cybersecurity and other IT courses based on the concept of modular key focus areas coverage that:</p> <ol style="list-style-type: none"> 1. Provides practical critical thinking, problem-solving, teamwork, presentation and communication opportunities that facilitate student development for skills that employers value 2. Creates awareness and appreciation for what cybersecurity professionals are exposed to in today's interconnected world 3. Builds the mindset that is required for future success in the cybersecurity field 4. Exposes students to information security career options that may be available to them by means of hands-on work these careers require 	Room 2768

Summit Schedule and Sessions Descriptions

THURSDAY • JUNE 18

AFTERNOON CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	LOCATION
4:15 -5:00 p.m.	Thursday Afternoon Presentations—Session V (cont'd.)	
	<p><i>High School Cybersecurity Education in Hawaii via Distance Learning and Hybrid Modalities</i> Presenter: Debasis Bhattacharya, University of Hawaii Maui College Cybersecurity is a popular topic among high school students given the recent publicity and sensational news articles that we see on a daily basis. But how does one go from pure hype and raw interest to a structured education of core cybersecurity topics among a distributed set of high schools? How does cybersecurity education seep through the fabric of high school curriculum, which is structured and rigid in its setup and delivery? This project explores an NSF ATE-sponsored project in Hawaii to disseminate cybersecurity curriculum and workforce development training to 12 local high schools using distance technology, virtual labs, remote tutors and a hybrid modality of instruction. This project is sponsored by NSF ATE grant #1204904.</p>	Room 2769
	<p><i>BHCC's Ethical Hacking Course: A Unique Approach to Ethics and Social Engineering</i> Presenter: Jamie Mahoney, Broadening Advanced Technological Education Connections (BATEC) The session will offer a hands-on look inside BHCC's new Ethical Hacking course and an analytical conversation about its unique approach to ethics and social engineering, led by the professors who created and teach the course. The assignments in the course are designed to specifically blend current technology topics and methods in moral philosophy, thus pushing students to explore their own ethics and moral values and cultivate their own ethos rather than relying on the opinions of others. Participants will play a bit of the social engineering game created for the course and engage in social engineering exercises and ethics discussions as if they were students in the course.</p>	Room 2772

EVENING ACTIVITIES

TIME	DESCRIPTION	LOCATION
5:15 p.m.	Transportation to JW Marriott—Buses load at 5:15 p.m. for the return trip to the JW Marriott	
6:00 – 7:30 p.m.	3CS Registration/Check-In	JW Marriott, entrance to Valencia Ballroom/Terrace
6:30 - 7:30 p.m.	Evening Reception	Valencia Ballroom/Terrace

Summit Schedule and Sessions Descriptions



FRIDAY • JUNE 19

All Summit sessions on Friday take place at the JW Marriott Hotel Resort and Spa.

MORNING PLENARY

TIME	DESCRIPTION	LOCATION
7:00 a.m. – Noon	3CS Registration/Check-In	JW Marriott, entrance to Valencia Ballroom/Terrace
7:00 - 8:00 a.m.	Continental Breakfast	Valencia Terrace of the JW Marriott
8:00 - 9:00 a.m.	Keynote Address: Haden Land	Valencia Ballroom



Haden A. Land

Haden Land is a certified systems architect with 30 years of professional experience across the public and private sectors. Currently, he is Vice President of Research and Technology for Lockheed Martin’s Information Systems and Global Solutions (IS&GS). He serves numerous U.S. government agencies, allied nations, and regulated commercial industries.

Mr. Land is responsible for product management and innovation of solutions supporting Defense, Intelligence, Civilian, Commercial customers, NexGen Cyber Innovation and Technology centers operations, strategic technology partnerships, STEM strategy, and technology planning for cloud computing, big data, cyber security, mobility, enterprise IT, service management and agile. He has domain knowledge within government, space, energy, law enforcement, financial, transportation, and healthcare.

Previously, he was Vice President of Engineering and CTO for Lockheed Martin IS&GS Civil and Vice President of Technical Operations and CTO/CIO for Lockheed Martin Enterprise Solutions. In addition, Land has extensive technical experience performing in many chief architect and chief engineer roles and has held a number of technical and engineering director positions. Previous employers include IBM and Loral.

Mr. Land’s applies his longstanding expertise in the engineering and technology industry to the next generation of Science, Technology, Engineering and Math (STEM) academia, leveraging his leadership roles to shape curricula for our future workforce and igniting and maintaining interest in advanced innovation. He serves as a Potsdam University Trustee, Capitol College Trustee, Prince George’s Community College Foundation Board Chairman, Hispanic Information Technology Executive Council Board Director, Cyber Maryland Advisory Board Member, MBRT STEMnet Advisory Board Member, Security Innovation Network Steering Board Member, Washington DC CIO Executive Committee Chair, Global CIO Governing Body Member and World Economic Forum Member.

Mr. Land has a bachelor’s degree in Mathematics and Computer Science from Potsdam University and a master’s degree in Computer Science from Syracuse University. He is a sought out global speaker and involved in various philanthropic initiatives. He has been selected eight times as one of the Top Hispanics in Business and Technology by Hispanic Engineer and Information Technology magazine; twice named a Most Influential Hispanic by the Hispanic Information Technology Executive Council; received the prestigious Global CIO Executive Top 10 Breakaway Leader award; received the Minerva Award for professional lifetime achievement from Potsdam University; and received an honorary doctorate degree in Humane Letters, Honoris Causa, from Capitol College.

Summit Schedule and Sessions Descriptions

FRIDAY • JUNE 19

MORNING CONCURRENT SESSIONS

Friday Morning Concurrent Sessions take place in meeting rooms of the JW Marriott.

TIME	DESCRIPTION	ROOM
9:00 a.m. - Noon	Friday Morning Workshops	
	<p><i>Smartphone Forensics</i> Presenter: Charline Nixon, Calhoun Community College Mobile devices are now used for risky activities such as purchases, social media, and emails. This course provide practical instructions and hands-on exercises on the unique sets of evidence available on Smartphones, cellphone SMS exploits, intrusion, rooting, malware, and other application vulnerabilities. This course will also cover the aspects of extracting and evaluating data from all type and technology of Smartphones.</p>	Cataluna A
	<p><i>Collaborative Curriculum Grant Committee Workshop</i> Presenter: Dr. Margaret Leary The committee will continue creating the common curriculum. (This workshop is by invitation only.)</p>	Galicia
	<p><i>Mapping and Preparing a CAE2Y Program Submission</i> Presenters: Dr. Vera Zdravkovich (lead), Dr. John Sands, Denisha Jackson To support institutions of higher education in building quality cybersecurity programs, the National Security Agency and the Department of Homeland Security jointly sponsor the National Centers of Academic Excellence in Information Assurance/Cyber Defense (IA/CD). The goal of the CAE IA/CD program is to reduce vulnerability in our national information infrastructure by promoting education and research in IA/CD and to produce a growing number of professionals with expertise in IA/CD disciplines. All accredited two-year, four-year and graduate level institutions in the United States can apply for designation as a CAE IA/CD. This session will review the CyberWatch "Guide for Mapping Courses to Knowledge Units." In addition, Vera and John will walk participants through the CAE2Y requirements and provide examples and best practices in completing the process. The session will include an examination of several recently approved applications and share tips, insight and resources.</p>	Madrid

Summit Schedule and Sessions Descriptions



FRIDAY • JUNE 19

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	ROOM
9:15 - 10:00 a.m.	Friday Morning Presentations—Session VI	
	<p><i>ACM Cybersecurity Learning Outcomes for Associate Degree IT Programs</i> Presenter: Cara Tang, Portland Community College Panelists: Elizabeth K. Hawthorne, Union County College, and Cindy S. Tucker, Bluegrass Community and Technical College</p> <p>As a standing committee of the ACM Education Board since 1991, the Committee for Computing Education in Community Colleges delivered the final version (October 2014) of its curricular guidance for associate degree Information Technology programs. Available online, the ACM Competency Model of Core Learning Outcomes and Assessment for Associate Degree Curriculum in Information Technology includes 50 core IT learning outcomes with associated assessment metrics. Of the 50 learning outcomes, seven focus on cybersecurity:</p> <ul style="list-style-type: none"> • Use a variety of practices for making end-user IT systems secure. • Differentiate between public and private data. • Differentiate among various techniques for making a computer network secure. • Demonstrate the techniques of defensive programming and secure coding. • Diagram the phases of the Secure Software *Development Lifecycle. • Modify a system to improve data confidentiality or regulatory compliance. • Summarize the security implications and risks for distributed IT systems. 	Castilla
	<p><i>Collaborating on Cybersecurity Competitions Between High School Coaches and University Partners</i> Presenter: Dr. Dan Manson, California State Polytechnic University, Pomona</p> <p>National High School Cybersecurity Competitions such as CyberPatriot, PICOCTF, and CSAW High School Forensics Competition have grown exponentially over the past several years. These competitions provide students with real-world cybersecurity skills before college, similar to high school sports preparing students for college teams. University Cybersecurity programs are now partnering with high school cybersecurity programs and teams, providing mentoring, facilities, and recruitment. In this panel, top high school faculty cybersecurity competition coaches and their university partners will discuss the value of high school cybersecurity competitions, how to get started, and how to work with university partners.</p>	Cataluna B
	<p><i>Access to the New Cyber Curriculum Department of Labor NTER Portal</i> Presenter: Dave Termunde</p> <p>The National Information, Security, and Geospatial Technologies Consortium (NISGTC) represents a group of seven colleges from around the country jointly awarded the TAACCCT Grant for their dedication to improving information technology training and to helping students transition to the workforce. As a member of the seven-college consortium, the faculty and staff at Moraine Valley Community College have created several new and updated courses that are freely available through the Department of Labor's National Training and Education Resource (NTER) portal. The session will present several security-related courses. The presenter will also share additional course materials including instructional materials, assessment tools and labs and exercises.</p>	Grand Ballroom A

Summit Schedule and Sessions Descriptions

FRIDAY • JUNE 19

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	ROOM
9:15 - 10:00 a.m.	Friday Morning Presentations—Session VI (cont'd.)	
	<p><i>The Art of Penetration Testing: Teaching Ethical Hacking</i> Presenter: Kevin Vaccaro, Center for Systems Security and Information Assurance (CSSIA)</p> <p>The art of pen-testing is getting more sophisticated as operating systems and network resources become more secure. This session will introduce some of the latest tools and techniques in performing pen-testing. Modern cyber defense requires a realistic and thorough understanding of Web application, network services test, remote access tools and hacking mobile device. The session will review the top 10 pen-testing tools. The session will also introduce an overview of undetectable backdoor tools.</p>	Grand Ballroom B
	<p><i>Strategies and Techniques to Promote Inclusion of Cybersecurity Content in the General Classroom</i> Presenter: Dr. Davina Pruitt-Mentle, Educational Technology Policy Research and Outreach</p> <p>This paper summarizes one of two companion studies that were designed to investigate the effectiveness of a professional development program on improving teachers' knowledge, skills, and practice toward cybersecurity topics, and fostering teachers' confidence in sharing content and activities with students in the general classroom setting. Highlights of how teachers have folded cybersecurity topics into their own content area in the general classroom setting are also shared. The study consisted of pre and post questionnaires, in-depth interviews, observations and document analysis. This presentation will provide an analysis of critical factors in the effective integration of cybersecurity topics in the general classroom and will share strategies and techniques to promote the same in your location.</p>	Murcia
10:15 - 11:00 a.m.	<p>Networking Opportunity Meet your colleagues in the Valencia Ballroom/Terrace</p>	
11:15 a.m. - Noon	Friday Morning Presentations—Session VII	
	<p><i>Techniques to Help Students Learn, Retain Information, and Win Cyber Competitions</i> Presenter: Douglas Spindler, City College of San Francisco</p> <p>Every semester I watch as students struggle in my class as they try to apply what they learned in their other classes in mine. I realize we should be teaching students how to use technology to do better in their classes. I have found a collection of skills and tools (some old, some new) that are helping my students succeed in my classes and their other classes. I would like to share what I'm teaching my students to succeed. From Walking with Einstein to software, let me share with you what I found is working for my students.</p>	Castilla

Summit Schedule and Sessions Descriptions



FRIDAY • JUNE 19

MORNING CONCURRENT SESSIONS (cont'd.)

TIME	DESCRIPTION	ROOM
11:15 a.m. - Noon	Friday Morning Presentations VII (cont'd.)	
	<p><i>Techniques to Encourage Proper Communication and Professionalism in the Classroom and Beyond</i> Presenter: Dr. Emily Coppa, Advanced Cyberforensics Education Consortium (ACE)</p> <p>In today's workforce it is critical that students possess the technical skills needed to perform their jobs. However, it is equally critical that they understand how to behave within that role. By learning proper business etiquette, communication skills and professionalism, students are better prepared to land the job of their dreams. They are also more likely to keep that job. In this roundtable we will discuss ways in which staff and faculty of cyber and IT programs can teach and encourage these skills.</p>	Cataluna B
	<p><i>NISGTC Partnership: A Case Study in Building Programs Around Student Success</i> Presenter: Dave Termunde, Center for Systems Security and Information Assurance (CSSIA)</p> <p>This session will introduce the dramatic success the (National Information, Security & Geospatial Technologies Consortium) NISGTC team experienced in improving enrollment numbers, student retention and completion rates in our cybersecurity and IT programs. The panel will share best practices and many of the tools and processes to improve overall student success. The session will include hand-outs, websites and hard copies of many of the program promotional materials. The team will also present social media and electronic media that was produced and used as part of this program. Finally, the team will present some of the critical partnerships that resulted in students better prepared for the workforce. Learn how our team worked with a local IT organization in preparing students for employment skills.</p>	Grand Ballroom A
	<p><i>Using Cybersecurity-Related Websites in the Classroom</i> Presenter: Kevin Vaccaro, Center for Systems Security and Information Assurance (CSSIA)</p> <p>The field of cybersecurity and information assurance has greatly expanded over the last 10 years. This session will include a fun and interactive tour of the rich Web-based resources and websites that can be used effectively in the classroom. The session will include live Web-based tools, access to standards and frameworks as well as resources that can be used to perform risk analysis and corporate espionage. The session will also introduce Web-based tools to increase student engagement and increase experiential learning. The session will introduce more than two dozen sites you can and will use in your classroom.</p>	Grand Ballroom B
	<p><i>Student Perceptions and Experiences of 3CS</i> Moderator: Dr. Warren Hioki, College of Southern Nevada Panelists: Buddy Scott, Emilie St-Pierre, Suzy Ogyrl, Julius Erwin, Osmond Jones</p> <p>The panelists are students at the College of Southern Nevada who attended this year's Community College Cyber Summit. They will share their impressions of 3CS – what did they learn and how will this experience influence their studies and career choices.</p>	Murcia



Summit Schedule and Sessions Descriptions

FRIDAY • JUNE 19

SUMMIT WRAP-UP AND ADJOURNMENT

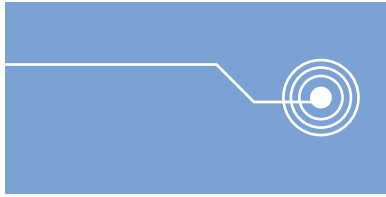
12:15- 12:30 p.m. • Valencia Ballroom/Terrace



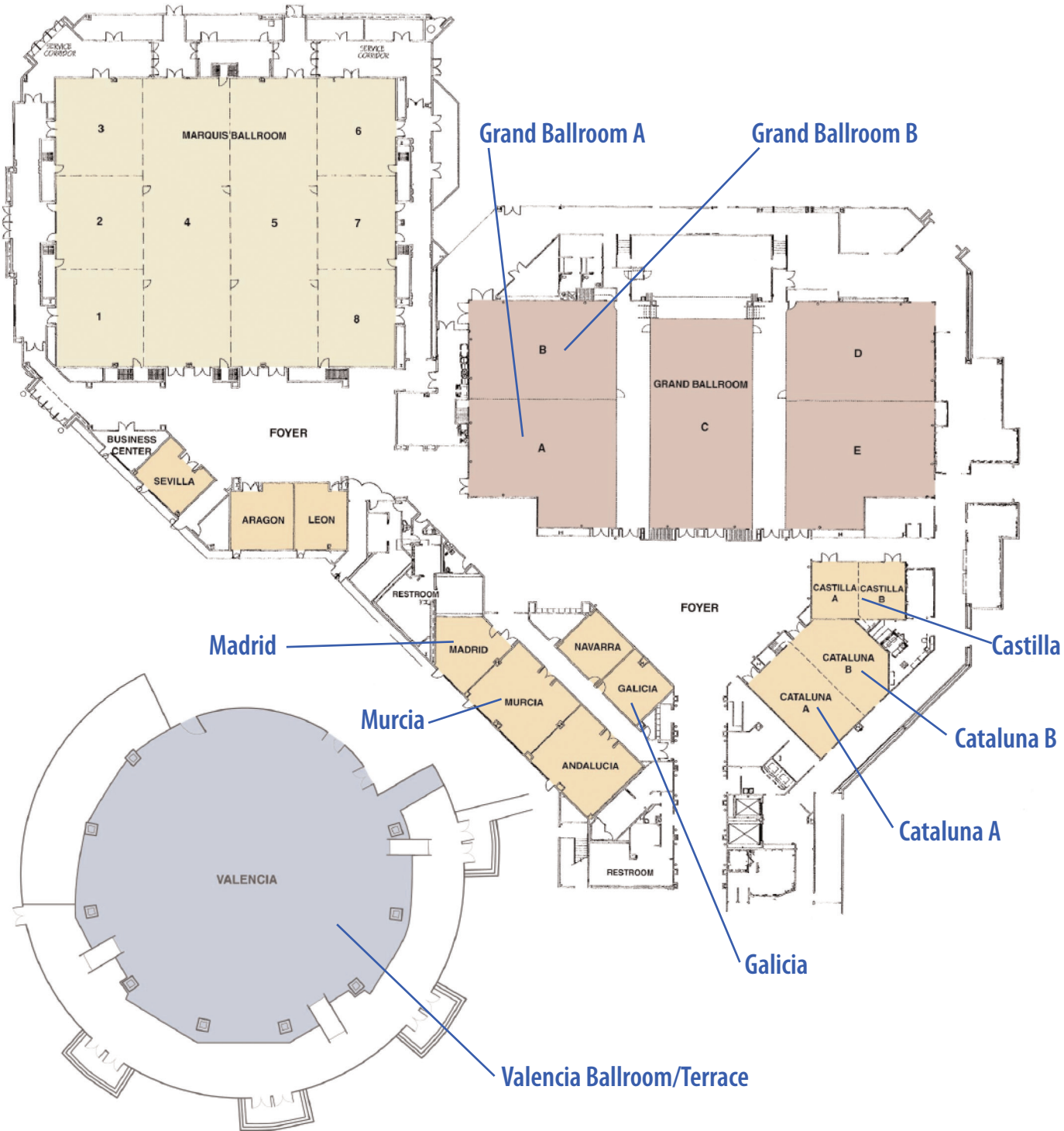
Community
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Cyber
Summit

See you next year in Pittsburgh!

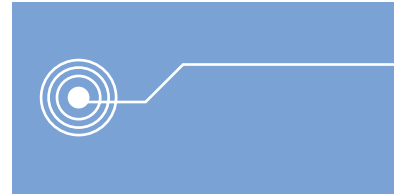




JW Marriott Conference Facilities



College of Southern Nevada Map



Cheyenne Campus

3200 E. Cheyenne
North Las Vegas, NV 89030
651-4000

MAP LEGEND

A: MORSE ARBERRY JR. TELECOMMUNICATIONS

Level 1:

- ① Auditorium
- ② Gallery
- ③ English Writing Lab

B: AUTOMOTIVE

C: CULINARY

Level 1:

- ① Russell's Restaurant

Level 2:

- ② Herbert People Computer Lab
- ③ International Languages
- ④ Campus Administration

F: FINANCIAL SERVICES

- ① Receiving

E: MAIN EAST WING

Level 1:

- ① June Whitley Lounge
- ② Food Services
- ③ Student Services
- ④ Student Government

Level 2:

- ⑤ Library

H: MAIN HORN WING

Level 1:

- ① Horn Theater
- ② Art Gallery
- ③ Box Office

N: MAIN NORTH WING

- ① Health Programs Advising
- ② Back Stage Theater

S: MAIN SOUTH WING

- ① Paul Laxalt Education Center
- ② Early Childhood Development Lab
- ③ Planetarium
- ④ Security
- ⑤ Bookstore
- ⑥ Student Life & Leadership
- ⑦ Gymnasium
- ⑧ Tutorial Services

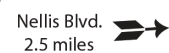
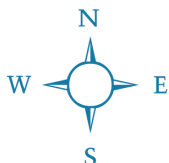
MODULARS

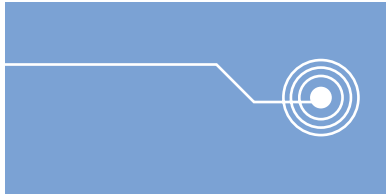
- M01 Child Care Center
- M02 Science Classrooms
- M03 Deaf and Hard Hearing Services
- M04 Classrooms
- M05-M06 Community College High School
- M07- M11 Facilities

O: OBSERVATORY

P: POLICE

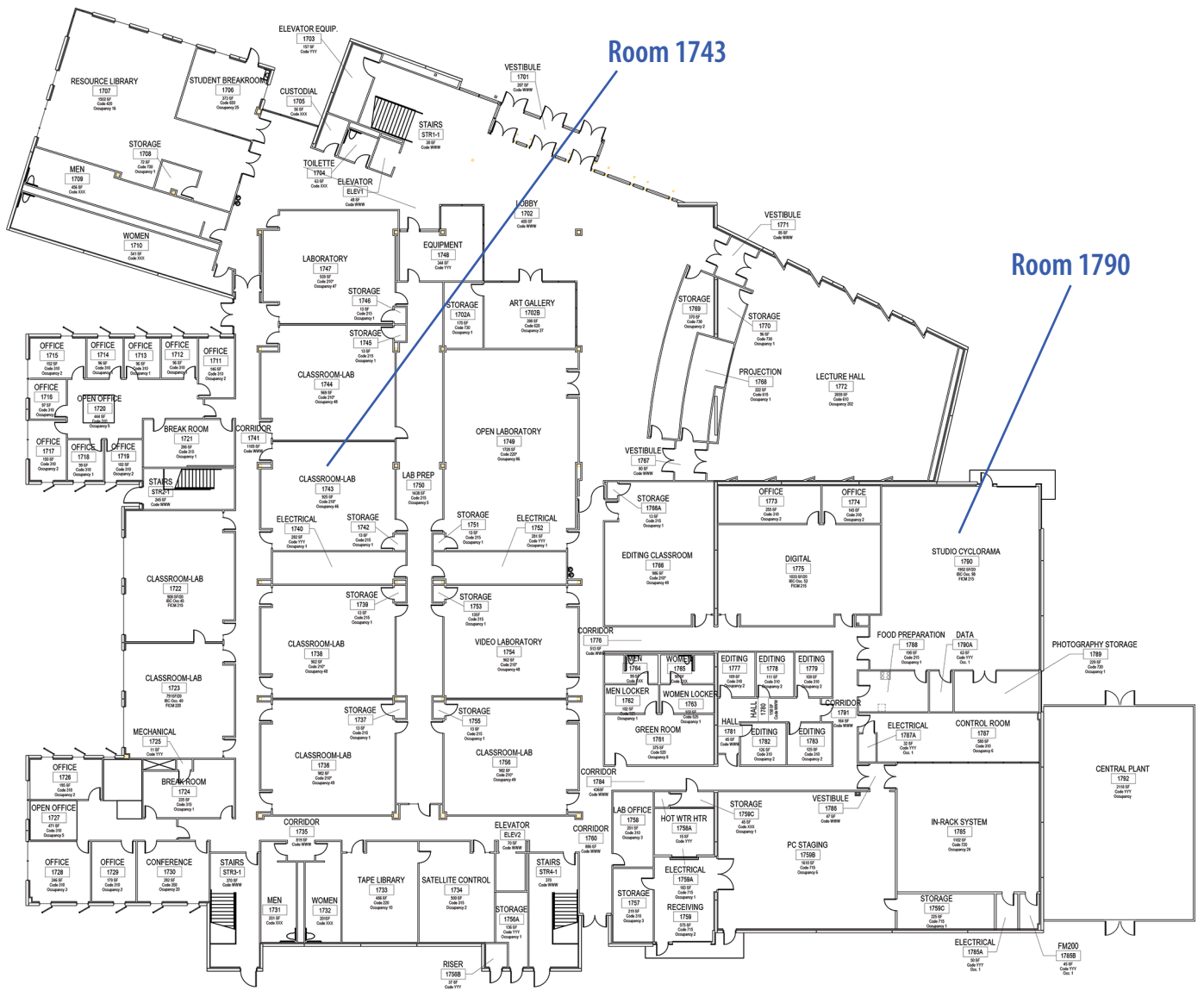
T: TRANSPORTATION TECHNOLOGY



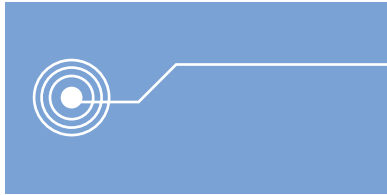


CSN Telecom Building Map

1st Floor



CSN Telecom Building Map



2nd Floor



Quick Locator: Room Assignments, Lead Presenters, and Short Titles

THURSDAY CONCURRENT WORKSHOPS					
	ROOM 1743	ROOM 2726	ROOM 2741	ROOM 2743	ROOM 2753
Thursday Morning Workshops 9:00 a.m.-Noon	Bowne— <i>Android App Security Auditing</i>		Koslab— <i>Test Drive CSSIA's New Security+ Course and Labs</i>	Vilkinofsky— <i>Hands-On Introduction to Cyberforensics</i>	Balek— <i>Introduction to Palo Alto Advanced Firewall</i>
Thursday Afternoon Workshops 2:00-5:00 p.m.	Bowne— <i>Android App Security Auditing (REPEAT)</i>	Masino— <i>Scripting for Cybersecurity Professionals (Power Shell)</i>	Koslab— <i>Test drive CSSIA's New Ethical Hacking Labs</i>	Vaccaro— <i>Open Source Digital Forensics in the Classroom</i>	Quissaunee— <i>Creating Cybersecurity Professionals with Hands-On Activities</i>

THURSDAY CONCURRENT PRESENTATIONS							
	ROOM 2726	ROOM 2747	ROOM 2764	ROOM 2767	ROOM 2768	ROOM 2769	ROOM 2772
Session I 9:15-10:00 a.m.	Quissaunee— <i>Developing a New Generation of Cybersecurity Professionals</i>	Jones and Sande— <i>Adapting Cybersecurity Graduate Courses Community Colleges</i>	Sullivan— <i>"Stop. Think. Connect" Academic Alliance</i>	Hawthorne— <i>Creating 2+2 Education Pathways in Cybersecurity</i>	Portillo— <i>SSCP/ CISSP: Alignment to CAE2Y KUs (GAP Academia)</i>	Sands— <i>Orientation for Careers in Cybersecurity</i>	Kwak— <i>Demonstration of Digital Forensics Using Python and Raspberry Pi</i>
Session II 10:15-11:00 a.m.	Quissaunee— <i>Cyber Aces</i>	Boisvert— <i>Analyzing the Cybersecurity Labor Market</i>	Hale— <i>Cybersecurity Education Concerns of the Health Care Industry</i>	O'Brien— <i>Introducing the New National CyberWatch Center Curriculum</i>	Nithianandam— <i>Developing a Nationally Recognized Digital Forensics Program</i>	Sands— <i>US Cyber Challenge: Cyber Quests Program Overview</i>	Pruitt— <i>Enhancing K-12 STEM Education Through Cybersecurity</i>
Session III 11:15 a.m.-Noon	Weeks— <i>Overview of NETLAB+ Enhancements</i>	Termunde— <i>Preparing Students for Industry Certifications</i>	Moore— <i>Building Successful High School Dual Credit Programs</i>		Hyzny— <i>Benefits of Industry Partnerships for Programs and Students.</i>	Sands— <i>Information Security Management Content: CASP</i>	Pruitt— <i>Impact of CTE Professional Development on Teachers' KSAs</i>
Session IV 2:15-3:00 p.m.		Spindler— <i>Fighting Cyber Crimes on a Global Scale: Microsoft Security Response Center</i>	Hale— <i>Cybersecurity Education Concerns of the Health Care Industry (REPEAT)</i>	Wolfe— <i>Advanced Wireless Security: Review of Emerging Technologies</i>	Hyzny— <i>Promoting Student Cybersecurity Teams and interaction</i>	Sands— <i>National Faculty Development Academy</i>	Mahoney— <i>Project Based Learning (PBL)</i>
3:15 – 4:00 p.m.—Networking Opportunity – Meet your colleagues in Room 1790, and all other breakout rooms.							
Session V 4:15-5:00 p.m.		Spindler— <i>Self-Encrypting Disks, Hybrid Disks, and Disk Forensics</i>	Wheeler— <i>Innovative Curriculum Model for Multi-Track Cybersecurity Career Pathways</i>	O'Brien & Jones— <i>Backstage with the National Cyber League (NCL)</i>	Piskopos— <i>Integrating Problem-Solving in Cybersecurity and IT Courses</i>	Bhattacharya— <i>High School Distance Learning Cybersecurity Education</i>	Mahoney— <i>BHCC's Ethical Hacking Course</i>

Quick Locator: Room Assignments, Lead Presenters, and Short Titles



FRIDAY CONCURRENT WORKSHOPS					
	CATALUNA A		GALICIA		MADRID
Friday Morning Workshops 9:00 a.m.-Noon	Nixon— <i>Smartphone Forensics</i>		Leary— <i>Collaborative Curriculum Grant Committee Workshop</i>		Zdravkovich— <i>Mapping and Preparing a CAE2Y Program Submission</i>
FRIDAY CONCURRENT PRESENTATIONS					
	CASTILLA	CATALUNA B	GRAND BALLROOM A	GRAND BALLROOM B	MURCIA
Session VI 9:15-10:00 a.m.	Tang— <i>ACM Cybersecurity Learning Outcomes for Associate Degree IT Programs</i>	Manson— <i>Cybersecurity Competitions Collaboration with High Schools and Universities</i>	Termunde— <i>Access to the New Cyber Curriculum Department of Labor NTER Portal</i>	Vaccaro— <i>The Art of Penetration Testing: Teaching Ethical Hacking</i>	Pruitt— <i>Strategies for Inclusion of Cybersecurity Content in the General Classroom</i>
10:15-11:00 a.m.— Networking Opportunity – Valencia Ballroom/Terrace					
Session VII 11:15 a.m.-Noon	Spindler— <i>Techniques to Help Students Learn, Retain Information, and Win Cyber Completions</i>	Coppa— <i>Techniques to Encourage Proper Communication and Professionalism in the Classroom and Beyond</i>	Termunde— <i>NISGTC Partnership: A Case Study in Building Programs Around Student Success</i>	Vaccaro— <i>Using Cybersecurity-Related Websites in the Classroom</i>	Hioki & CSN Student Panel— <i>Student Perceptions and Experiences of 3CS</i>



2015
Community
College
Cyber
Summit

Blueprint for the New and Expanded Role of Community Colleges in Cybersecurity Education



FOCUS AREAS AND TOPICS

Following is a list of the seven focus areas and topics within each focus area addressed in the Blueprint.
Please circle which focus area/topic you are writing about.

Certifications and Standards

- Public Standards
 - NICE Workforce Framework
 - Knowledge Units
 - DoD 8570
 - CAE2Y
- Industry Certifications
 - Cybersecurity Certification Collaborative; certification organizations
 - Competency exams; demonstration of hands-on skills
 - Specific certs (Security+, CISSP, etc.)
- Mapping courses/curriculum to public standards (Workforce Framework, KUs, CAE2Y) and industry certifications

Curriculum

- Associate degree programs
- Certificate programs
- Stackable credentials
- Cybersecurity computer labs, servers, workstations, infrastructure
- Funding of classrooms and labs
- Faculty development:
 - Faculty participation in vendor training
 - Adjunct faculty availability
 - Faculty with necessary training and experience
- Core courses
- Specializations/Concentrations
- Online courses/labs
- 2-year school curriculum standards: Model courses and programs

Non-Curricular Components of Community College Cybersecurity Programs

- Student competitions
- Scholarships – SFS, other federal scholarships, state-sponsored, and private
- Clubs, camps, other extracurricular activities
- Commitment from high-level administrators and public officials
- Branding, promotion, and public perceptions of the community college role in cybersecurity education
- Public awareness of cybersecurity

Cybersecurity for the National Critical Infrastructure

- National Collaborative for Cyber Defense and Critical Infrastructure
- Information and communications technologies (ICT)
- Transportation (air, rail, roads, waterways)
- Critical manufacturing and industrial control systems
- Health care and public health
- Energy production and distribution (electrical, nuclear, oil and gas, other)
- Water and wastewater
- Financial systems and services
- Food and agriculture
- Public safety (police, fire, rescue)
- National defense
- Other government (non-defense, including state and local)





Career Preparation

- Educational Pathways/Articulations
 - High school to community college
 - Associate degree to bachelor's degree
 - Bachelor of Applied Technology
- Career Pathways
 - Internships
 - Entry-level qualifications
 - Position descriptions
- Workforce Development
 - Nontraditional students
 - Stackable certificates
 - Veterans

Recruitment

- K-12 outreach
- High school curriculum tracks
- Support for STEM education generally
- Women and minorities in cybersecurity

Research

- Research in community college cybersecurity education
- Applied/Classroom research
- Collaboration among 2-year and 4-year institutions
- Research in workforce needs
- Evaluation of cybersecurity programs
- Data repositories
 - National CyberWatch Center Library
 - Archiving with ATE Central

