**NICE Working Group**

**Meeting Minutes**

**Date: 10/25/2017 Time: 3:30 PM EST**

**Adobe Connect session**:<https://nist-nice.adobeconnect.com/nicewg/>

**SharePoint Page:** <https://nistgov.sharepoint.com/sites/NICEProgram/NICEWG>

# Introduction and Ground Rules

* Danielle Santos, NICE Program Manager, welcomed members to the meeting. The NICE Working Group (NICEWG) is setup to provide a mechanism for collaboration between academia, government and industry and to discuss strategies and actions to aid in workforce development.
* During this meeting the Adobe Connect chat box feature should be utilized to provide feedback and ask questions.
* Danielle noted that participation in the NICEWG is not intended for advertising and promotional purposes and to keep this in mind when participating and using the chat feature.

# NICE Program Office Updates

* Rodney Peterson, Director of the National Initiative of Cybersecurity Education, welcomed members to the meeting and wished everyone a happy National Cybersecurity Awareness Month. Rodney reflected on the NICE mission in light of the enthusiasm shown by the NICEWG who are committed to a common cause: to energize and promote a robust network and an ecosystem of cybersecurity education, training, and workforce development. Building networks across public and private partnerships is important. Another point for reflection are the NICE values such as: fostering communication, facilitating collaboration and sharing resources. As NICE moves forward we reflect on those values.
* There was a congressional hearing yesterday in which individuals from universities, civil society and industry shared valuable information with a focus on public and private solutions to the cyber workforce. A key take away is that there remains a tremendous amount of work to do to raise awareness of cybersecurity and the efforts we are all putting toward building a cybersecurity workforce.

# Opening Remarks

* Industry Co-Chair, Kathi-Hiyane-Brown, welcomed members to the call. Kathi thanked Rodney for the recap of the congressional committee meeting on cybersecurity workforce development. These are critical conversations to have in the greater public. No matter the sector we are from it is crucial to look at how we are building the workforce and what qualifications are really needed. When the congressional committee meeting summary is published Kathi encourages all to take the time to read through.
* It is National Cybersecurity Awareness Month and Whatcom Community College has worked regionally to promote awareness. Kathi encourages all of the higher education leaders to find opportunities to showcase efforts that faculty, staff and students are doing.

# Standing Items

* **Fun Facts** – Vincent Nestler presented on the Black Hat Hacker Survey.
1. DEF CON and Black Hat are annual conferences specifically geared toward hacking and expressing what is cutting edge in the hacking community. Black Hat is more corporate where DEF CON is more casual. DEF CON draws upwards of 25,000 people in attendance and essentially covers every possible topic people can and should know. DEF CON has different villages set up such as the ‘Internet of Things’ of lock picking.
2. 80% of hackers say humans are the most responsible for security breaches. Humans are the largest target and easiest way for hackers to get information. The NICE initiative is targeting this issue with the K-12 subgroup initiative. It’s crucial to get people to start thinking about this early on.
3. 73% of hackers say firewalls, antiviruses, etc. are irrelevant if people are not consistently updating them.
4. 32% of hackers say accessing privileged accounts was the number one choice for the easiest and fastest way to get at sensitive data.
5. It’s a candidates market as colleges and universities cannot keep up with the demand. 3 million cybersecurity jobs will need filling by 2020. Cyber pros are holding out for pay packages that are 15 to 20 percent more than what most employers are offering. New people to cybersecurity crossing from IT positions are having a difficult time transitioning into their new roles due to lack of real world experience and expertise. This is leading to unexpected turnover at organizations that have high threat levels.
6. The [NICE Challenge Project](https://nice-challenge.com/) is one way to start addressing some of these needs. The challenges allow students to learn the cybersecurity tasks and rolls based on the framework. Additionally, it provides experience and helps transition students.
7. See the attached presentation for more information and find out more here: [https://thycotic.com/resources/black-hat-2017-survey/?utm\_medium=Internal-Email&utm\_source=Pardot&utm\_campaign=black-hat-2017&utm\_content=black-hat-survey&utm\_term=080717](https://thycotic.com/resources/black-hat-2017-survey/?utm_medium=Internal-Email&utm_source=Pardot&utm_campaign=black-hat-2017&utm_content=black-hat-survey&utm_term=080717%20)
* **Report Roundup** – Michael Kaiser spoke on ‘Securing Our Future: Cybersecurity and the Millennial Workforce”.
1. This is the fourth week of National Cybersecurity Awareness Month. The success of this month is really measured through the actions being taken in the greater community by folks such as members of the NICE working Group. The velocity depends on others and we see a tremendous push out into the community. It is a very organic and grassroots effort.
2. Yesterday, Mr. Kaiser testified before the New York State Senate and discussed the need to get more people into cybersecurity careers.
3. StaySafe.org has been doing this study since 2013. The study is focused on the security practices in the workforce and preparedness for cybersecurity careers among young adults in 9 countries. There have been some improvements about awareness over time which is a reflection of all of the work everyone has been doing in these spaces. The age range of participants are from 18-26 years old.
4. Cyber Role models are important and gender gaps still exist.
5. 52% say they are aware of the responsibilities involved in a cybersecurity job. 32% say a teacher spoke to them about cyber as a career.
6. Messages and ideas about cyber careers are pushing their way down into the system but many young adults say they need more information about what the job entails. The respondents who said they were less likely to choose cyber as a career said they do not know enough about the opportunities.
7. The top reason to choose a cyber career is the belief that a secure internet is important. Further questioned about the type of organization they would like to protect, the answers were varied: the government, hospitals, banks, military, health care, etc.
8. 32% have met or spoken to a cybersecurity professional. More men have met a cybersecurity professional. 72% said the person discussed cyber as a career with them.
9. See the attached presentation for more information and find out more here: <https://www.raytheon.com/cyber/rtnwcm/groups/cyber/documents/content/2017_cyber_report_rev1.pdf>
* **Event Engagement** – Rodney Petersen spoke about National Cyber Security Career Awareness Month as well as the Women in Cybersecurity Conference.
1. National Cyber Security Career Awareness Month: The National Cybersecurity Alliance is doing a Facebook series of live sessions. The attached graphic has more information.
2. Women in Cybersecurity Conference: The conference is now opening its call for participation. The web links have been posted in the chat and can also be found in the attached presentation. The focus of the conference is for students and practitioners. Anyone has the opportunity to participate as a presenter. The grant application process is now open as well.
3. See the attached presentations for more information and find out more here:  [https://www.facebook.com/staysafeonline/videos/10156110999824218](https://www.cio.gov/hiringevent/%20https%3A//www.caecommunity.org/calendar/cae-virtual-career-fair) and here: [www.wicys.net](http://www.wicys.net)
* **Strategy Stories** – Martha Laughman spoke about the Cybersecurity Career Program. This topic aligns to the NICE strategic plan objective 2.3: Grow creative and effective efforts to increase the number of women, minorities, veterans, persons with disabilities, and other underrepresented populations in the cybersecurity workforce.
1. Martha shared about what they are doing at SecureSet and their different take on training. They offer hands-on tech training, full time (45 hours per week) for 20 weeks which is then followed by an internship.
2. They developed a program with the military that allows active duty members to prepare in this training. Active duty members are allowed to apply in the last 180 days before transitioning out of the military. They also offer a $10,000 scholarship. Participants attend a boot camp and receive community support.
3. It is a closed recruiting environment where corporate sponsors will have a chance to reach out to the class and interact with the students. Participants receive a diploma for cybersecurity and a years’ worth of college credit.
4. A member inquired about MOS selection: Martha commented that they do not select based on MOS. Selection is based on technical aptitude, willingness to relocate, security clearance, years of experience and soft skill interviews.
5. A member inquired if they have participants from the Air Force? They do have a few Air Force participants but not many. You can contact your local SFL tap office who can provide directions to a skill bridge to find out the regional coordinator.
6. They are really looking toward developing a pipeline from diverse populations and veterans are the first group they are working with. They have tons of industry interest in sponsoring classes but are still looking for sponsors.
7. Martha can be reached at: Martha@Secureset.com
8. See the attached presentation for more information.
* **Metric Moment** –Steve Auerbach presented on the CyberHawaii Education Workforce Development and Measures for Success.
1. K-12 is one education system in Hawaii with 169,000 students across all of the islands. Additionally, the University of Hawaii has ten campuses across the islands with 55,000 students. Hawaii is home to NSA Hawaii as well as Paycom.
2. CyberHawaii was launched in October and Rodney Petersen came out to speak as a distinguished member.
3. CyberHawaii has three core tenants: Workforce & Education, Innovation and Economic Development and Threat Mitigation.
4. They have received funding from NSA and NSF.
5. Under Education and Workforce Development they are working toward:
	1. Promoting a deeper awareness and understanding of cyber threats.
	2. Developing and accelerating educational opportunities.
	3. Ensuring students are job ready and successful in securing jobs.
6. See the attached presentation for more information and find out more here: <https://www.fbcinc.com/e/cyberhawaii>

# Subgroup Updates

* **K-12** – Kimberly Henderson spoke for Virginia Lehmkuhl -Dakhwe, co-chair, and provided the K-12 update.
1. The subgroup is gearing up and preparing for the [National Cybersecurity Career Awareness Week](https://www.nist.gov/itl/applied-cybersecurity/nice/national-cybersecurity-career-awareness-week).
2. Additionally, they have been working on the NICE K-12 Conference.
3. The subgroup is beginning to think about and plan for projects in the next year.
* **Collegiate** – Rodney Petersen provided the Collegiate update.
1. The Collegiate subgroup kicked off a new project team last week. The team had their first meeting last Friday. The focus of the team is how to address academic and career pathways. They will begin with a survey or environmental scan of what institutions are doing. Ultimately, they will put together some tools and resources and perhaps conduct a literature review.
2. Those interested is helping with the effort can contact the project lead Khallai Taylor: ktaylor194@ccc.edu
* **Competitions** – Laurin Buchanan, co-chair, provided the Competitions update.
1. The group is working to develop a calendar of competitions to be maintained on the CyberCompEx site. As part of this effort they are requesting group members and the wider NICE Working Group members to send any information on Competition’s.
2. The group is also working to identify opportunities for congratulating competitions winners.
3. They are working on the development of a podcast series and seeking volunteers from the subgroup to take part in the project.
4. Finally, the Competitions subgroup is planning to do some outreach with the Collegiate subgroup to work together on student passports and portfolios.
5. Those interested in these efforts can contact Laurin Buchanan here: Laurin.Buchanan@securedecisions.com
* **Training and Certifications** – Linda Williams, co-chair, provided the Training and Certifications update.
1. The Training and Certifications group held a workshop at the NCCoE today with 23 individuals in attendance both in person and online. The day was spent discussing and debating a process of creating a mapping exercise. A matrix to map certifications to the NICE Framework and align to work roles has been developed. First, C3 will provide their input then members will layer in other industry input. All input of all stakeholders will be considered in this work. The completed document will likely be updated about twice a year following which it will be moved to a relational database. They also discussed how certifications will remain important since employers demand competency. Certifications will only be mapped – not certificates. They are looking to ensure they identify how their mapping is created. They reviewed various taxonomies and in concert with [CyberSeek](http://cyberseek.org/) they settled on beginner/intermediate and advanced.
2. They reviewed their one-pager discussing the value of certifications to drill down to key points and will be presenting it at the NICE Conference.
* **Workforce Management**- Kristin Judge, co-chair, provided the Workforce Management update.
1. Kristin will be at the NICE conference with draft copies of the recent Workforce Management Human Factors guidebook.
2. Currently, the Workforce Management group has two main projects: the KSA Group and the guidebook group.
3. The KSA group is holding a pre-conference workshop. They are working on ensuring the NICE framework is interpreted correctly.
4. The guidebook group are creating a guidebook to provide guidance and actual steps to take for an organization to secure its cybersecurity.
5. The draft guidebook is now complete and copies will be available at the conference.
6. The next steps are to get feedback from the larger NICE Working Group, incorporate all the feedback and have a final product by Q1 of next year.

# Project Progress Reports

* **NICE K-12 Cybersecurity Education Conference**
1. The conference will be held December 4-5 in Nashville, TN at the Omni Hotel.
2. There will be a pre-conference workshop at no cost for 7th-9th grade girls sponsored by IBM. It will be held at the National Tech Council and the Nashville Girl Scouts will promote the event.
3. If you have yet to get your hotel room you should do so before the government rate is no longer available. The date to receive the rate has been extended until November 7th.
4. Exhibitor tables are still available. Additional information can be found on the website or you can email Felicia Rateliff directly: felicia@ikeepsafe.org
5. Find out more here: <https://www.k12cybersecurityconference.org/>
* **NICE Annual Conference - Danielle Santos**
1. The NICE Conference is only two weeks away. The agenda has expanded since the last meeting. If you visit the conference website you will see the cybersecurity soap box sessions in the exhibitor halls. They have incorporated longer breaks to drive traffic to the exhibitor halls. One topic will be the NICE Working Group and the co-chairs and leaders are invited to attend and speak out. There will also be a meet and greet.
2. The pre-conference seminars are filling up quickly with the ‘Application and Uses of the NICE Cybersecurity Workforce Framework’ pre-conference already closed. There is still room in the remaining two.
3. There is a thought leadership meeting on Monday, November 6th from 10:30 am to 12:00 pm sponsored by ABET and organized by Casey O’Brien. Please visit the following site for additional information: <https://www.fbcinc.com/e/nice/abet.aspx>
4. Find out more here: <https://www.fbcinc.com/e/nice/default.aspx>
* **NICE Challenge Project – James Ashley**
1. James will be speaking at the NICE K-12 Conference in December and is exploring a booth option.
2. The NICE Challenge Project will be releasing new content this Friday which includes updates to the live catalog of 70 challenges.
3. The web portal features will be taken out of beta and the player terminal will be removed. This helps simplify the databases as well as customize needs. The team is working to make the portal easier to use.
4. There are now over 160 educational institutions registered, 220 professors and 1,000 students. There have been over 8,000 challenges attempted.
5. Looking ahead, as the project reaches a point of maturity, the focus will be more on marketing and onboarding. Monthly webinars will be conducted with the first one on a curator crash course. This will cover anything faculty or a professor will need to know about how to use the challenges and portal as well as integrating the challenges into coursework.
6. Links to sign up for the first two webinars are as follows:
	* 1. Curator crash course: <https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgoo.gl%2Fforms%2FXmaOK5rQl9odfOmx1&data=02%7C01%7Cdanielle.santos%40nist.gov%7C32796fe17f294cc461bb08d51beb3759%7C2ab5d82fd8fa4797a93e054655c61dec%7C1%7C0%7C636445619415355901&sdata=wPsTa1JZQ8H5AVQeE1SnSip882JCaP9OEFUKZLSoTvU%3D&reserved=0>
		2. Meet the challenges: <https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgoo.gl%2Fforms%2FXmaOK5rQl9odfOmx1&data=02%7C01%7Cdanielle.santos%40nist.gov%7C32796fe17f294cc461bb08d51beb3759%7C2ab5d82fd8fa4797a93e054655c61dec%7C1%7C0%7C636445619415355901&sdata=wPsTa1JZQ8H5AVQeE1SnSip882JCaP9OEFUKZLSoTvU%3D&reserved=0>
7. More information on the NICE Challenge Project can be found here: <https://nice-challenge.com/>

# New Business

* Tina Ladabouche spoke about GenCyber Applications.
	1. GenCyber’s focus is on reaching student from K-12 to generate an interest in cybersecurity. The program is funded through the NSA, NSF and grant awards.
	2. The program holds camps for both students and teachers all over the country. The goal of the camps is to create interest in cybersecurity careers and generate an understanding of correct and safe online behavior.
	3. The camps can be for students, teachers or a combination of both. Last year there were 130 camps held in 39 states. There is interactive learning as well as the inclusion of guest speakers.
	4. The call for proposals is currently open but closes on Friday, October 27th at mid-night.
	5. A member inquired if a non-education organization can host a camp. Yes, but cybersecurity professionals must be included.
	6. See the attached presentation for more information and find out more here: <https://www.gen-cyber.com/>
* Davina Pruitt-Mentle spoke about the National Cybersecurity Career Awareness week.
	1. The National Cybersecurity Awareness week is scheduled to take place November 13 – 18, 2017. Note that November is also the National Career Development Month.
	2. The idea was to couch this week in the Career Development month in order to emphasize the demand and opportunities as well as highlight the numerous pathways and ongoing efforts.
	3. There is a kickoff event being held at the NCCoE on November 13th. They are thrilled to have Lakeisha Mathews, the director at the University of Baltimore & Trustee for Higher Education, National Association of Career Development. She will be followed by Eric Sparks who is the Assistant Director of the American School Counselor Association. Additionally, there will be a panel of high school students to provide a variety of perspectives.
	4. Please visit the website to find out ways you can get involved and how to promote the week in your area. There is also a Facebook frame that can be added to your profile, a snapchat filter, as well some suggested hashtags to tweet. Any resources people wish to share are welcome.
	5. See the attached presentation for more information and find out more here: [nist.gov/nice/nccaw](https://www.nist.gov/itl/applied-cybersecurity/nice/national-cybersecurity-career-awareness-week)

# Summary of Action Items - Minutes and presentation materials will be sent to all members.

# Next Meeting Reminder - The next NICEWG meeting is scheduled for November 29, 2017.