NICE Community Coordinating Council

Meeting Minutes

June 23, 2021 | 3:30-5:00 p.m. ET

I. Introduction and Ground Rules

Provided the background of the NICE Community Coordinating Council, along with instructions on how to use the chat and the ground rules for the meeting.

II. Opening Remarks

- a. Industry Co-Chair Jon Brickey, Senior Vice President, Mastercard
 - Conferences are still being held virtually, which is a good thing considering the times, so good on those businesses who were still able to hold them.
 - From a lot of the consumers of cybersecurity products we are seeing in-person meet-ups being held until next year, unless considered mission critical.
- b. Academic Co-Chair Marni Baker-Stein, Chief Academic Officer and Provost, Western Governors University
 - The Office of Post-Secondary Education at the US Department of Education is having public hearings on stakeholder feedback on potential issues with rulemaking sessions. This can potentially affect students and institutions as to the future of financial aid.
 - The graduates coming out of educational institutions are carrying burdens brought on by COVID-19 and federally increasing student loan debt.
- c. Government Co-Chair Rodney Petersen, Director of NICE
 - Appreciates the framing remarks on higher education by Marni and how policies are sometimes overlooked, which leads to larger issues.
 - In the summer season where NICE and NIST are welcoming students, virtually, and having internships being completed virtually.
 - There are four students with NICE this summer and information has been provided in the chat about the promotion of employers providing workplace learning opportunities.
 - We have a student from the High School Program, which is usually a commuter program with the local high schools.
 - Another student is from the Summer Undergraduate Research Fellowships (SURF) program, which can receive students from all over the country.
 - There is a student from Professional Research Experience Program (PREP) program, which is a grant program, so it is not open to all students and institutions.
 - We additionally have another student, who is interning with the Center of Academic Excellence in Cybersecurity program.

- There is a NICE webinar, July 21, 2021 on <u>Securing Operational Technologies and</u>
 <u>Control Systems with a Skilled Workforce</u>, in which we will be discussing the security of operational technologies such as control systems or industrial control systems.
- NIST is updating its guide to Industrial Control Systems Cybersecurity and has put out a pre-draft call for comments.
- A NICE Framework workshop will take place the last week in August to gather subject matter experts on Industrial Control Systems.

III. Standing Items

a. Strategy Stories - New Developments that Align to NICE Strategic Plan

GenCyber Camp

Presented by: Ashley Greeley URL: https://www.gen-cyber.com/

GenCyber is a Federal Grants program which looks to inspire the next generation of cybersecurity stars by working to incite and strengthen cybersecurity awareness. Funding for GenCyber is provided by several government agencies and the program office is housed at the National Security Agency (NSA).

- A strategic realignment is taking place with GenCyber as the summer of 2021 is the busiest summer thus far. Due to the pandemic, a lot of camps were moved to the summer of 2021.
- 160 camps are taking place this year and about 70% of camps are virtual, due to the pandemic. Four capacity buildings are going on, which are new and a bit larger in aspect then a normal camp.
- 144 student camps and 23 teacher camps and then three combination camps which
 are focusing on students and teachers in the same environment. Forty-six states and
 DC and Puerto Rico are hosting these camps. Ninety-eight academic institutions
 hosting camps and 31 which are new to GenCyber.
- The program office is finalizing the funding positions for the 2022 programs.
 Requirement to do pre- and post-camp outreach along with the summer camp model is the reason to go from calling them camps to programs.
- Increasing the focus on diversity such as the Native American populate, Alaskan populations, rural, and home-schooled area. Attempting to reach more people for cybersecurity opportunities.
- A lot of the programs are using the NICE Framework and job roles to allow for the institutions to maintain a career-oriented focus with their programs.
- The camps will remain free as we continue to work towards diversity and diversity
 of thought so we reflect the K12 strategic plan. We want STEM and Non-STEM
 students aware of these opportunities.
- There will be a call for 2023 programs around September/October. Use the Gen-Cyber URL to look at the five-year report as well as to sign up for any notifications for the call for 2023 programs.

Q: How are you keeping students engaged after the camps are over?

A: It varies by each academic institution, but some of the things that are done are inviting students to campus for events. Going to the students and hosting events within school corporations. The program office sets the parameters, but the institutions create within those boundaries in their local areas.

Q: Is the 2022 session for GenCyber closed for submissions?

A: The 2022 session is closed and the next opening for 2023 is in the fall. We have extended the Period of Performance to 2 years based on feedback from program office.

b. Report Roundup - Learning from Good Ideas

Economic Impact Study

Presented by: Pat Sullivan, Founding Board Member, Cyber Center of Excellence URL:

The business environment in San Diego is very collaborative, facilitated by non-profit organizations to work on common and foundational issues to promote business growth, in which the Cyber Center of Excellence (CCoE) focuses on growing cyber.

- The presentation is a preview of the economic impact study that was completed last week and to be rolled out tomorrow, June 25, 2021.
- Cybersecurity continues to be a growing sector that has increased about a 15% since 2019, even during the COVID-19 challenges.
- Looking into Artificial Intelligence (AI) and Machine Learning (ML) as a component of cybersecurity since the inception of the CCoE, around 2014. It has continued to grow within cybersecurity and the products over the years. It has grown from about 10% to over 50% of companies using AI/ML over the past 3 years and is continuing to grow.
- There has been about 3 times more growth in cybersecurity than other companies within the region of San Diego.
- This is a snapshot. There is a virtual release event tomorrow from 10:00 a.m. to 11:30 a.m. PST, to learn more information. You can go to the links in the slide, but they are not active at this time. They will be active after the meeting tomorrow.
- c. Framework Feature Applications and Uses of Workforce Framework for Cybersecurity Virtual Career Pathway

Presented by: John Sands, Ph.D., Moraine Valley Community College URL:

John Sands will be presenting with some additional presenters throughout this presentation. This initiative was funding the solicitation of NSA last year.

- We proposed five different parts to this initiative; to increase cybersecurity career experience through a VR environment to allow college and high school students first-hand experience in a cybersecurity environment. The first phase completed.
- Working with University of Alabama Huntsville, building a curriculum of dual credit programs accessible to teachers and advisors to see what programs are available from K12 and CAE institutions.

- Forming a National Business Partnership to support some of the efforts with their corporate partners.
- VR demonstration taking place and being completed, which allows students to go through and explore and interact with the avatars to experience a cyber environment.
 - The three-floor facility was based on the seven rules on the NICE
 Framework, in which there are seven appropriate label rooms in this VR.
 - You can see your position in real time, which also allows your instructor to see where you are in real time.
 - The documentation contained within the VR is real, actual, readable documentation as well as video that can be watched while in the VR.
 - The idea is to have instructor guidance and student challenges so that students are wandering around but there is structured learning with the student's goal to find certain things.
 - Q: When you say adding more easter eggs, do you mean adding more challenges for the students?
 - A: Yes, when adding easter eggs we mean putting together little hints and challenges to create a narrative and story to assist with the learning.
 - We started with the creation of a 3-D environment initially because it's the hardest and where the money needs to be spent to build the environment.
 Going forward, we will create a 2-D environment for a wider audience and can run on many more devices.
 - We feel that in 5 years, this will be the norm in the learning environment, and we will still have the 2-D environments for institutions and individuals who do not have the resources for the 3-D.

Q: Do you collect data on the student journey on the environment and how and when they interact with in the system?

A: That will be collected in the next phase because we are very early in the development of this project as we just started in the fall. Most of the time was taken to build the environment, easter eggs, and avatars. We will move forward to development and scaling and then on to assessments of the system. Once the students complete the program, an extensive report will be provided to the instructor.

d. Research Review

Digital Citizenship and Media Literacy

Presented by: Cassidy Francies, Policy Researcher, Education Commission of the States URL: https://www.ecs.org/media-literacy-and-digital-citizenship/

The Education Commission of the States (ECS) is a non-partisan, non-advocacy organization that serve state policy makers throughout all 50 states.

This is done through four buckets of work: 1) host meetings, 2) provide ongoing council, 3) create reports, and 4) complete independent research.

- A recent study found 67% of students could not tell the difference between news stories or ads when on webpages stating that it's sponsored content.
- Another study concluded 91% of teachers believe that increasing media literacy will help for better and more ethical engagement online.
- Legislatures see through these studies that increase media literacy is a promising solution to the current problem.
- The definitions of the terms media literacy and digital citizenship have two vastly different definitions but are sometimes used interchangeably. We found often in legislation that the terms were used within the definition of each other.
- In research from 2015 through 2020, at least 79 bills were introduced in 28 states, and 14 enacted in 10 states dealing with media literacy and digital citizenship.
- In 2019, Colorado passed a House Bill, which created a media literacy privacy committee about media literacy education. The report was sent to the legislature in 2020.
- In 2021 another House Bill was passed so that the recommendations from the previous House Bill were put into action.

IV. Working Group Updates

- a. Promote Career Discovery
 James "Jimmy" Baker, Cybersecurity Evangelist and Author; or Roland Varriale II,
 Cybersecurity Analyst, Argonne National Laboratory; or Monica Gomez, Cisco
 - Spent the last few meetings discussing inputs and feedback from objectives 1 4 of the NICE Strategic Plan. Spent the last meeting addressing Objective 5 -- galvanizing employers on how to promote discovery of cybersecurity career opportunities.
 - Currently finalizing a draft of statement, action, and metrics that we have come up with within the Working Group.
 - We will be next looking to prioritize the next few actions that we have, starting with the need to identify multiple career paths for the work roles in the private and public sectors.
 - Consider joining the group and a link will be provided for the next meeting on 7/21 at 3:30 p.m.

b. Transform Learning Process

Dr. Aurelia T. Williams, Interim Vice Provost for Academic Administration, Norfolk State University; or Richard Spires, Instructor, Learning Tree

- Next meeting tomorrow at 3:00 p.m.
- We have finished addressing all six objectives within our goal statement. Looking to attack two objectives per meeting over the next three meetings, to fine tune the data we have gathered.
- During the next meeting, we will start with the first two objectives we have drafted and look to enhance our current data and identify specific projects and priorities to work on.

c. Modernize Talent Management

Karen Jensen, Saaby Consulting; or Kevin Perry, Chief Cyber Training, DoD Cyber Crime Center/Cyber Training Academy; or Melissa Woo, Executive Vice President for Administration, Michigan State University

- Our last meeting was on 6/17/21 where we focused on the Success Measures of the Implementation Plan Worksheet our Strategies and Tactics.
- Brainstormed on the relationship with college faculty and advisory boards to inform the need for degrees within cybersecurity.
- The next meeting will be held on 7/15/21. Please join us as we welcome your advice.

V. Community of Interest Updates

a. Apprenticeships in Cybersecurity

Tony Bryan, Executive Director, CyberUp; or, Jennifer Oddo Executive Director, Strategic Workforce Education and Innovation, Youngstown State University

- We had a first in our last meeting, where we have invited employers to bring in their experience with presentations on how they use apprenticeships.
- We have a comparative analysis group that is aggregating data around apprenticeships and around talent models and boot camps.
- Please join us at the next meeting, which is schedule for Friday, 6/25/2021.

b. Cybersecurity Skills Competitions

Amelia Phillips, Highline College; or Brad Wolfenden, EmberSec

- During our meeting last week, we welcomed Tony Bryan, who completed a
 presentation about apprenticeships in cybersecurity during the last meeting.
- We are working projects ahead of the National Cybersecurity Awareness week, one
 of which is a scavenger hunt-style competition with all levels of skill.
- A panel with individuals from different sectors. Will hear about the US cyber games that this Community of Interest is aligned with and working with.

c. K12 Cybersecurity Education

Terrance Campbell, CCTE Cybersecurity Teacher, Shelby County Schools; or Laurin Buchanan, Secure Decisions

- The last meeting was Thursday, 6/10/2021, where Davina reviewed the resources at the K12 cybersecurity resources for at home website.
- Since June is National Internet Safety Month, we focused on links for kids in online safe behavior and practices for children.
- A briefing from Grace Williams on how to prepare K12 students for internships.
- For the next meeting 7/14/2021, they are planning a bring-your-intern-to-themeeting for an active discussion. They really want to understand how to connect K12 to the broader world of cyber.

d. NICE Framework Users

Karen Wetzel, Manager of the NICE Framework

- No monthly meetings with this Community of Interest.
- This group is for users of the Framework to share ideas, best practices, issues, and challenges they may be having within this community.
- They are starting every Monday with an e-mail to stir up conversations. If you are looking to lead in conversation, please reach out to Karen.

VI. Project Progress Reports

a. Cybersecurity Career Awareness Week – October 18-23, 2021
 Presented by: Davina Pruitt-Mentle, NICE
 URL: https://www.nist.gov/itl/applied-cybersecurity/nice/events/cybersecurity-career-awareness-week

- The 3rd week in October is when Cybersecurity Career Awareness Week takes place.
- Expecting everyone to help celebrate Cybersecurity Career Awareness Week. Look forward to learning how you are celebrating and looking to get the word out on how you are going to celebrate.
- NICE K12 Cybersecurity Education Conference December 6-7, 2021
 Presented by: Felicia Rateliff, Director of Operations & Programs, iKeepSafe
 URL: https://www.k12cybersecurityconference.org/
 - This event will be a fully virtual event. Nice to hear the industry trend of continuing to be virtual for things.
 - Three keynotes for the conference: Jennifer Buckner from MasterCard, Sarah Kaleel from Comcast, and Efren Zamaro, a student keynote who works with CrowdStrike.
 - We are expecting more keynotes to come in the next few weeks.
 - We are looking for a few students for Cyber Signing Day. They need to either be in high school or recent 2021 Graduates, that are in an internship or will soon be in an internship, apprenticeship, or training program. Email provided in chat for students and those who would like to nominate a student.
 - Call for proposals ended June 18 and we received a record number of entries in the last minute. They will begin reviewing and have selections by the end of June.
 - Full agenda and registration are slated to launch in August. There are opportunities for sponsorships and exhibitor booths.
- NICE Conference and Expo June 6-8, 2022
 Presented by: Randy Pestana, Florida International University URL: https://niceconference.org/
 - The NICE Conference and Expo has been moved to summer 2022 and will remain in the summer for years to come. You can go to the NICE Conference page to see the theme and proposal page so that when they are opened in September you are able to submit a proposal.

- There are four tracks this year: 1) Growth and development through life-long learning, 2) building a 3D culture, 3) hybrid roles to solve cybersecurity needs, and 4) emerging trends in cybersecurity.
- A series of events that we want you to sign up for; 1) Regional Initiative for Cybersecurity Education and Training (RICET) for the Americas on curriculum development. You can register at niceconference.org/events.
- On 11/16/21, the NICE Symposium is scheduled to take place. It will be virtual with an in-person component. More information to come.
- d. Centers of Academic Excellence (CAE) in Cybersecurity Community
 Presented by: Tony Coulson or Amy Hysell, Cybersecurity Center, California State
 University, San Bernardino

URL: https://www.caecommunity.org/

- Last week we launched an updated CAE Community site. Upgrades to the site include access to information within the CAE communities. A way to connect students and parents with CAE institutions.
- On September 17, 2021, we are hosting the 5th annual National Cybersecurity
 Virtual Fair, which brings together students and alumni from over 300 CAE
 institutions across the country where internships and employment are offered from
 a variety of disciplines.
- If you are interested in hosting a booth, you can contact them at support@caecommunity.org
- e. US Cyber Games

Presented by: Jessica Gulick, CEO, Katzcy URL: https://www.uscybergames.com/

- We are putting together a travelling sports team of cybersecurity athletes ages 18 –
 26 to compete globally, with the first competition being in Athens, Greece in December.
- The event has been kicked off successfully with over 570 people registered. The videos have been edited and are available on the website under the video center.
- We also kicked off the open, which is one of the three major pieces of this program, which is the tryouts. The second piece is the cyber combine.
 - 688 people registered for the open and about 46% show up for the combine.
 - o 23% of the people that showed up to the event were female.
 - 33% of the people that showed up to the event were of a diverse background and races.
 - 13% of the people that showed up to the event were military veterans.
- The leaderboard is currently on the website at https://www.uscybergames.com/team. Each athlete received 1, 2, or 3 digital badges.

- The coaches are ready to be announced and the kick of the virtual combine is to take place July 9, 2021. This is a 2-month effort to help the athletes train and work on their cybersecurity skills.
- The big day is October 5, 2021 it is the US Cyber Games draft day where the 20 members of the team will be selected as the inaugural US Cyber Games team. They will compete against nine other nations in a two-part event. The first part being CTF and the second part being red versus blue.
- Sponsors areneeded for the US Cyber Games team to pay for travel, jerseys, and equipment.

VII. Closing Remarks and Next Meeting Reminder

The next NICE Community Meeting will be July 28, 2021, at 3:30 p.m. ET