

NICE Community Coordinating Council Meeting Minutes June 28, 2023 | 3:30-5:00 p.m. ET

- I. Introduction and Ground Rules NICE Program Manager Susana Barraza
 - The NICE Community Coordinating Council was established to provide a mechanism in which public and private sector participants can develop concepts, design strategies, and pursue actions that advance cybersecurity education, training, and workforce development.
 - Members are encouraged to participate in the meeting via the platform chat space and the Q&A space.
 - Reminder: The meeting is not intended for marketing or other commercial purposes.

II. Opening Remarks

- a. Government Co-Chair Rodney Petersen, Director of NICE
 - It was good to see many NICE Community Coordinating Council members at the NICE Conference earlier this month in Seattle, WA.
 - Announcement of new co-chairs who will be with us next month:
 - 1. The new industry co-chair will be Michael Alicea, the Chief Human Resources Officer at Trellix. Michael is a well-know leader in the Human Resources community.
 - 2. Ongoing effort to select a new academic co-chair to replace Paul Bingham.
 - NICE has a <u>new logo</u> as part of the rebrand of NICE, we are dropping the spelled out acronym and simply going by "NICE" to indicate:
 - 1. We are no longer an initiative, but an instituted program, and
 - 2. To show we are more than just cybersecurity education, but focusing on broader training and workforce development efforts, too.
 - NIST has new <u>funding</u> for community-based cybersecurity workforce development partnerships. And <u>information webinar</u> about the funding was held on June 13th and a <u>NICE Webinar</u> on examples of how to coordinate community-based partnerships was held on June 21st.
 - Congress has <u>declared</u> June 2023 as National Cybersecurity Education Month.

III. Standing Items

a. Report Roundup – Learning from Good Ideas

Evaluating a Consortium of Schools Training Cyber Talent Presented by Luke Koslosky, Georgetown URL:

<u>https://cset.georgetown.edu/publication/building-the-cybersecurity-workforce-pipeline/?utm_source=Center+for+Security+and+Emerging+Technology&utm_campaign =ead7f01523-</u>

Building+the+Cybersecurity+Workforce+Pipeline&utm_medium=email&utm_term=0_fc bacf8c3e-ead7f01523-406647114

- This report evaluated the effectiveness of National Centers of Academic Excellence in Cybersecurity (NCAE-C) schools. There are now over 400 NCAE-C schools in three designations – Cyber Defense (CD), Cyber Operations (CO), and Research (R). Many CAEs are part of a larger training and development ecosystem outside of classrooms.
- The report sought to understand the NCAE-C program and determine whether they are graduating students at a higher rate than non-CAE schools.
- NCAE-C schools graduated 50% of all Bachelor's degrees in cybersecurity in 2020.
- NCAE-C is showing rapid growth in program completions, compared to all other schools in both cybersecurity AND in all other fields of study.
- Gender imbalance remains a challenge in students who participate in these education programs.
- The report makes a single recommendation. The recommendation is to Congress to officially authorize NCAE-C as a program of record and provide yearly appropriations for the program.
- Q&A

Q: Do you have data on other demographics such as race and ethnicity? A: Yes, but that data is not in the report. Findings were similar to other studies in that most students are white males, with a smattering of Asian males.

Q: Do you have data by other states to show graduates of CAEs v non-CAEs? A: Yes, top states were: Maryland, Virginia, and Florida for graduates of Bachelor's programs; and Virginia, Florida, and Texas for graduates of Associate degree programs.

Q: Do you have any data on the employability of CAE students v non-CAE students?

A: No data is available, but would love to study this. Anecdotally, employers are often brought in as part of standing up a CAE program, so there are partnerships in place that help students connect to employers.

b. Strategy Stories - New Developments that align to NICE Strategic Plan

502 Project

Presented by Nathan W. Fisk, Ph.D., University of South Florida URL: <u>https://502project.org/</u>

- Nathan was joined by student, Quinn Vaughn, who has been instrumental in the implementation of the NICE Framework in the 502 project.
- The 502 project is an attempt to broaden access to the cybersecurity community. There is a big issue dealing with significant gender and racial disparity in cybersecurity. As a result, it's not sufficient that access to just pipelines and pathways are broadened, but that we also broaden access to the community.
- The 502 project centers around running a large-scale discord server to support events. The server provides students with access to challenges, events, and other activities year-round.
- The NICE Framework is at the core of the project by using Work Roles to create pathways for students. Events and challenges are tagged with Work Roles, which helps to observe trends on what students are learning. Discord bots will connect people with each other who are working on the same challenges or attending the same events.
- The 502 project is mostly for students, but mentors can join at https://502project.org/mentors-join
- Q&A:

Q: How many people have participated so far? A: About 200 students and 100 professionals or adults have participated. However, the goal is to make the community much larger. Participants are all throughout the U.S., but primarily from the Southeast now since that's where funding started.

c. Framework Feature – Applications and Uses of Workforce Framework for Cybersecurity

Implementing NICE

Presented by James Stanger, PhD, CompTIA URL:

https://comptia365.sharepoint.com/:f:/s/stanger/EgubTBTXr_hlv6faMilbjjMBnGUpf9_k HJv1d2qpKg4Evw

- The <u>Cybersecurity Credentials Collaborative (C3)</u> is a formal group of major cybersecurity certification providers who work with governing bodies (such as DoD, ANSI, NIST, etc). Members of the C3 contribute to <u>cyberseek.org</u> and <u>cybersates.org</u>
- The C3 has created a mapping of certifications to NICE Framework Work Roles. The mapping is available at <u>https://comptia365.sharepoint.com/:f:/s/stanger/EgubTBTXr_hlv6faMilbjjMBn</u> <u>GUpf9_kHJv1d2qpKg4Evw</u>

- Certifications in the mapping include those from CompTIA, SANS, CertNexus, CompTIA, IAPP, ISC2, and ISACA.
- Q&A:

Q: Are there plans for a next phase or next steps? A: The C3 is seeking someone with web development experience to help update the C3 website and to make the mapping more publicly available. The C3 is also interested in engaging in dialogue on what it means to map or align certifications with standards.

Q: What should academics do with the mapping? A: Academics can see what common areas there are between the courses that they are implementing, the work that NICE is doing, and what the certification providers are doing in global markets.

d. Research Review- Driving Research on Effective Practices

Bridging Cybersecurity Workforce Skill Gap with Experiential Learning: The Role of Cybersecurity Clinics

Presented by Dr. Samuel Owusu, Marymount University

- There was an observation that most academic teaching is not through hands-on exercises. Additionally, most rely on in-house labs or subscribe and pay for services, which have its pros and cons, but a framework for cybersecurity clinics can be the solution for a low-cost option to implement hands-on experience into classroom teaching.
- The study sought to identify cybersecurity clinics implemented in the US and outside of the US. 8 were found in US and 1 in Africa. The cybersecurity clinic in Africa is out of CyberGhana and local universities.
- The study looked across all 9 clinics and were able to find similarities between them.
- There are 4 types of clinics
 - Emerging Cyber Teaching Hospital requires all students in the cybersecurity program to participate in clinicals
 - Community Health Cyber Clinics voluntary and community services for local government and small and medium-sized businesses
 - o Semi-Cyber Clinic Clinicals as a 3-credit semester course
 - No-cyber clinic (Global Cyber Alliance) provides cybersecurity awareness tools for community outreach
- The research found that all clinics are different and that a consistent model was needed to have the impact that is desired. A 6-component framework was designed to show the primary components needed in a cybersecurity clinic.
- The study proposes that clinics should remodel what they do to align to the 6component framework and that any new programs consider adopting the framework.

IV. Working Group Updates

- a. Promote Career Discovery Co-chair: Roland Varriale, Argonne National Laboratory
 - a. The group did not meet last month, so there is not much to report.
 - b. The Ambassador Program is still working to finalize a plan and launch soon.

b. Transform Learning Process Co-chair: Dr. Donna Schaeffer, Marymount University

- a. Richard Spires is an outgoing co-chair and Donna thanks him for his participation.
- b. Tara Wisniewski is an incoming co-chair. Tara is the Executive VP for Global Markets and Engagement at (ISC)2.
- c. The group gave two presentations at the NICE conference on project teams that started in January
 - i. One presentation on performance-based assessments the team put together a report of findings from a survey of National Centers of Academic Excellence in Cybersecurity (NCAE-C) schools. The report is in stages of being finalized.
 - ii. Another presentation on DEIA the team created a series of handouts on topics related to diversity and inclusion as well as a webpage of resources.
- d. The team is now introducing a new project focused on recognizing faculty as valued members of training and education efforts. The team is hoping to pull together a resource page and potentially find sponsors for awards for new faculty, university faculty, community college faculty, and training and development organizations from industry.
- c. Modernize Talent Management Co-chair: Lynsey Caldwell, Leidos
 - Lynsey is an outgoing co-chair and welcomes two new incoming co-chairs Jo Justice, from the Business Information Security Office (BISO) at Liedos and Olesya Menon, a Security Education Program Manager at Google.
 - The last Modernize Talent Management Working Group meeting welcomed guest speaker, Nelson Abbott from NPower, who talked about how Human Resources (HR) can adjust some of their processes to capture more candidates to fill entry level roles and how keeping diversity, equity, and inclusion in mind helps us all think about underutilized resources.
 - The team is looking for feedback on their draft <u>Guide for Writing Effective Job</u> <u>Descriptions</u>. The team will also circulate this draft document with HR teams before publishing. The Guide is meant to be used before, during, and after hiring and includes checklists for what to include in job postings and a rubric for what language to include when determining criteria (proficiencies required) for the position.

V. Community of Interest Updates

- a. Apprenticeships in Cybersecurity Co-chair: Debbie McLeod, McLeod Information Systems
 - In the month of June, the Apprenticeship Community of Interest (COI) welcomed a guest speaker Chris Rick, Manager of Strategic Outreach in the Department of Labor Veteran Employment Training Services Division.
 - The Veteran Affairs (VA) approves employers as registered apprenticeship providers and provide a worker opportunity tax credit per veteran they hire through these apprenticeships.
 - The Department of Labor has an employer guide for those who are seeking to hire veterans. They also provide information on how an apprentice can use their GI Bill as a housing allowance as they transition to their new positions.
 - Learn more at https://www.dol.gov/agencies/vets
 - Next month's featured speaker will be Mary N. Chaney, Chairwoman, CEO & President of Minorities in Cybersecurity, Inc.
 - Next meeting: July 14, 2023, at 11:00 a.m. 12:00 p.m. ET

b. Cybersecurity Skills Competitions

Co-chair: David Zeichick, California State University, Chico

- June's meeting was held at the NICE Conference in Seattle, WA.
- The panel discussed past presentations and projects. The meeting focused on receiving ideas for future topics.
- A couple of items they reviewed during their Jam Board session were the competitions website and future meeting topics.
- Co-chair David presented to the National Cyber League (NCL) on a new Canvas shell. The new community NCL Canvas shell is a pre-created site for collaboration. Faculty and instructors will be able to access materials for their classes.
- Amelia Philips has completed her term as co-chair with the NICE Cybersecurity Skills Competitions Community of Interest (COI). David is seeking a new co-chair to serve in the NICE Cybersecurity Skills Competitions COI. Additionally, he will recruit a student to serve as third co-chair in the COI.
- Friendly reminder, the International Cybersecurity Championship and Conference (IC3) is happening August 1-4, 2023, in San Diego, CA.
- Next meeting: July 20, 2023, at 3:30 p.m. 4:30 p.m. ET

c. K12 Cybersecurity Education

Co-chair: Thomas Trevethan, Palo Alto Networks Cybersecurity Academy

- Thomas and Davina hosted a K12 Cybersecurity Education COI meeting during the NICE Conference and Expo.
- During June's meeting, Thomas and Davina provided the audience with an overview of past deliverables and current projects.
- The COI is currently working on Cybersecurity Career Week (Oct 16-21, 2023), the Quarterly Teacher Recognition Program, and the Ambassador Program.
- The COI has determined to keep one meeting day instead of alternating between Wednesday and Thursday every month. The COI will meet every 2nd Wednesday of the month.
- Next meeting: July 12, 2023, at 3:30 p.m. 4:30 p.m. ET

d. NICE Framework Users

Staff: Mike Prebil, Cybersecurity Workforce Analyst, NICE

- The NICE Framework Users Group will have their first open call on Thursday, June 29, 2023.
- During this call, members will be able to provide feedback, ask questions, and any troubleshooting regarding to the NICE Framework. The open calls are meant to be informal and conversational gatherings.
- The invited speakers for the first open call are Nate Fisk and Quinn Vaughn with <u>Project 502</u>.
- To join the NICE Framework Users Group, email <u>niceframeworkusers+subscribe@list.nist.gov</u>.

VI. Project Progress Reports

- a. NICE K12 Cybersecurity Education Conference (Phoenix, Arizona) December 4-5, 2023 Presented by Felicia Rateliff, iKeepSafe URL: <u>https://www.k12cybersecurityconference.org/</u>
 - The conference will be held Dec. 4-5, 2023, in Phoenix, Arizona. Pre-conference workshops will be held Dec. 2-3, 2023.
 - This year's event will be held in Hilton Phoenix Resort at the Peak. The conference location is close to the airport and walking distance to restaurants and shopping centers.
 - The deadline for Call for Proposals has been extended to July 28, 2023.
 - This year's conference theme is "Designing K12 learning experiences to build a diverse and skilled cybersecurity workforce".
 - The planning committee announced the <u>2023 Student Nomination Application</u> for National Cyber Signing Day. The purpose of the National Cyber Signing Day

celebration is to increase awareness of cybersecurity career options and pathways available to K-12th grade students.

- The planning committee announced Student Keynote speaker, Cougarjade Reyes. Cougarjade is an 11th grader at Cactus High School, Phoenix, AZ. He is an Outstanding Freshman Cadet of the JROTC CyberPatriot Team. He started an Innovation Center for computer certifications.
- The National School Counselor Association will host a School Counselor Panel at the conference.
- iKeepSafe is still seeking sponsors and exhibitors. Learn more.
- To receive any conference updates, sign up <u>here</u>.
- b. US Cyber Games

Presented by Brad Wolfenden

URL: https://www.uscybergames.com/

- US Cyber Games recently wrapped up their US Cyber Open. They had about 780 people attend and over 2,200 individuals participate in their US Cyber Open Capture the Flag Event. The athlete leaderboard will be available on the US Cyber Game <u>website</u>.
- The US Cyber Combine will be happening July 7-September 1, 2023. During the US Cyber Combine, athletes can expect structured training, evaluation, and assessment, both on an individual level and in groups or on teams.
- US Cyber Team Draft Day will be happening October 16, 2023, in Washington, DC. Livestream opportunities will be available.
- The International Cybersecurity Championship and Conference (IC3) is happening July 31 August 4, 2023, in San Diego, CA.
- The IC3 will consist of the International Championship Games, expert gamer talks, and a hands-on game expo. They expect to have representation of about 84 countries.
- Learn more about US Cyber Games <u>here</u>.
- Q&A: O: How do students out

Q: How do students outside the country get involved in the IC3? A: On the <u>https://www.ic3.games/</u> site, there is a list of participating countries and students can reach out to the Point of Contact to inquire how they can get involved.

- NICE Conference and Expo (Dallas, Texas) June 3-5, 2024
 Presented by Randy Pestana, Florida International University
 URL: <u>https://niceconference.org/</u>
 - The pictures, conference breakout presentations, and plenary session recordings of the 2023 NICE Conference are <u>now available</u>.
 - Please provide conference feedback via the Whova App or emails received.
 - The 2024 NICE Conference will be held On June 3-5, 2024, at the Sheraton Dallas, TX. The conference dates for the next 5 years are now

available <u>here</u>. Conference locations will be announced as time approaches.

- This year the conference planning committee received 176 proposals including lightening talks. The planning committee is continuously seeking ways to increase speaking opportunities for the conference.
- The conference was sold out with 638 paid registrations.
- This year's conference had over 300 first time attendees and the most industry participation since the 2019 Phoenix conference.
- Florida International University wants to thank and recognize their partners who support the NICE Conference.

VII. Featured Topic

NICE Framework Competency Areas Presented by Karen Wetzel, NICE Framework Manager URL: <u>https://www.nist.gov/news-events/news/2023/06/request-comments-new-list-nice-framework-competency-areas</u>

- The NICE Framework Competencies: Preparing a Job-Ready Cybersecurity Workforce (NIST Internal Report (NISTIR) 8355) is <u>now available</u>. This document describes more indepth what the NICE Competency Areas are and gives more information on how they are distinct and can be used with Work Roles.
- The <u>Competency Areas Authoring Guide for Workforce Frameworks</u> is now available.
- NICE is defining a Competency Area as a cluster of related Knowledge and Skill statements that correlates with one's capability to perform Tasks in a particular domain. This is targeted for learners to discover areas of interest, inform career planning and development, identify gaps for knowledge and skills development, and provide a means of assessing or demonstrating a learner's capabilities in the domain.
- NICE Framework Competency Areas may be additive to one or more Work Roles and may be used independently of Work Roles. Additionally, they can represent a domain that spans multiple Work Roles (incorporates Knowledge and Skill statements from multiple Work Roles). Lastly, they may represent emerging domains that do not yet have established Work Roles.
- Competency Areas do not duplicate existing Work Roles.
- The Competency Areas Authoring Guide goes well in hand with the <u>Playbook for</u> <u>Workforce Frameworks</u>.
- NICE has released a new proposed list of NICE Framework Competency Areas for comment. Learn more.
- Comments on the NICE Framework List of Competency Areas are due August 5, 2023. Submit comments to NICEFramework@nist.gov.

VIII. Closing Remarks and Next Meeting Reminder

The next NICE Community Coordinating Council Meeting will be July 26, at 3:30 p.m. ET.