

NICE Community Coordinating Council

Meeting Minutes

March 26, 2024 | 3:30-5:00 p.m. ET

- I. Introduction and Ground Rules NICE Program Manager Susana Barraza
 - a. 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.
 - b. Members are encouraged to participate in the meeting via the platform chat space.
 - c. Reminder: The meeting is not intended for marketing or other commercial purposes

II. Opening Remarks

- a. Industry Co-Chair Michael Alicea, Chief Human Resources Officer, Trellix
 - i. Cybersecurity threats are on the rise. We need to open our aperture. If we don't, we won't get close to what we need to do to support industry.
 - ii. On a recent panel, Michael was asked, "Isn't Al going to cure the [workforce] gap?" Al will allow us to need less people, but we'll still have a gap. Bad actors are using Al, so we'll need to learn how to combat that.
- Academic Co-Chair Zarina Blankenbaker, Ph.D., President, Tarrant County College Northwest
 - i. Performance outcomes funding is becoming crucial in influencing higher education institutions across the country. This approach is also helping to shift the focus on hiring based on skills.
 - Colleges are "moving a mile a minute" and developing targeted certifications and training programs to address emerging trends and technologies in cybersecurity.
 - iii. Colleges can also serve as career learning hubs for reskilling and upskilling.
 Continuous learning is critical in a field as dynamic as cybersecurity. Life-long learning is a must to meet the changing demand.
- c. Government Co-Chair Rodney Petersen, Director of NICE
 - i. The NICE Conference Local Stakeholders' Engagement Event was held in Dallas, Texas this week. Two things were announced:
 - A second Notice of Funding Opportunity for <u>RAMPS Regional Alliances</u> <u>and Multistakeholder Partnerships to Stimulate</u> cybersecurity education and workforce. Awards from the first round of funding will be

announced soon. A webinar will be held in the coming weeks with more information on the second round of funding.

- New data on <u>CyberSeek</u> was announced. You will notice that the numbers went down there are 100,000 fewer jobs than last time the data was updated. The number of people employed in cybersecurity jobs continues to grow. Additionally, the reduction also reflects a normalization after the boom of the pandemic, and job posting being open for a long time. Al hiring is also up significantly, which may be impacting the number of cybersecurity jobs open due to limited resources and changing priorities.
- Registration is open for NICE Conference and Expo.

III. Featured Content

a. Strategy Stories – New Developments that align to NICE Strategic Plan

Skills-based Hiring in the Commonwealth

Presented by Melissa Pullin, Sarah Unsworth, and James Canavan, Commonwealth of Massachusetts

URL: https://www.mass.gov/news/governor-healey-signs-executive-order-directing-state-agencies-to-institute-skills-based-hiring

- Massachusetts has long since removed requirements for degrees, but are now undertaking the "hard work" to change the thoughts and practices of hiring managers to ensure a skills-based approach is adopted.
- Hiring for skills helps talent pool and helps ensure that hiring practices are done without biases.
- A toolkit for hiring managers has been created covers three main areas: why
 hire for skills, what skills-based hiring is and how it's different, and how to
 recruit talent using a skills-based approach.
 - To support recruitment efforts, there are additional resources for writing job descriptions, creating a recruitment plan, and how to screen and select candidates based on skills.
- A skills initiative for all IT jobs across the commonwealth has helped with understanding the talent they have, help with internal promotions, and establish learning pathways for their employees. The program allows individuals so a self-assessment of their skills to help develop their own learning pathways.
- Q: Massachusetts is home to a large number of institutions of higher education. How is "hiring based on skills and not degrees" being received or messaged to colleges and universities in the state? What are the implications for "the value of a higher education"?
 - We have received support from the educational community, particularly the community colleges in Massachusetts. As we like to say we hire for skills, whether those skills are developed through experience, education, or other experiences.

b. Report Roundup – Learning from Good Ideas

Skills-Based Hiring: The Long Road from Pronouncements to Practice
Presented by Stuart Andreason, The Burning Glass Institute
URL: https://www.burningglassinstitute.org/research/skills-based-hiring-2024

- The Burning Glass Institute is a new non-profit that uses data from Lightcast (the new name for the Burning Glass company).
- The number of degree requirements in job posting is greater than the number of degree holders currently working in the field. For example, 91% of web developer job postings require degrees, but only 71% of those currently working in web development have degrees.
- 400 times more jobs are not requiring a degree that once did. This is encouraging and showing that we are taking steps in right direction.
- 1 out of every 700 hires is a skills-based hire for a non-degree holder. This tells
 us that although degree requirements are being removed, people holding
 degrees are still being selected for those jobs.
- When degree requirements are dropped, we see that organizations are able to tap into untapped and hidden talent.
- Roles that are likely to be able to go through a degree removal include: web development, computer programmers, and other jobs (event planners, construction managers, etc).
- Q: Do you feel that the wage level goes down without degree requirement?
 - We haven't observed significant changes in wages offered after degree requirements are dropped. We have seen that the wage gains are bigger for non-degree holders (25%) and employers retain those workers longer (20%). Retention is positive, but could mean lower mobility for workers.
- Q: Do you have more detail on the "untapped talent" area you mentioned? Such as roles, industries, and populations that fit in that category. "Untapped talent" may not be advancing due to perceived lack of cultural fit, which leads to groups being boxed out from promotion (such as neurodivergent).
 - We have largely looked at that as occupation to occupation moves —
 there are definitely more ways that workers are facing barriers like
 neurodivergence, being an ex-offender, veteran status. We have a
 senior fellow, Mike Bernick, who has been working on neurodivergent
 worker issues and could be a good contact if it is of interest I'd be
 happy to follow up with additional information as well.

Framework Feature – Applications and Uses of Workforce Framework for Cybersecurity
 The Inclusion of Cyber Resiliency
 Presented by Ronald Ross, Computer Scientist, National Institute of Standards and

URL: https://www.nist.gov/itl/csd

- In cybersecurity, much of the focus and priority has been "above the water line", but "below the water line" -- software and systems will impact the future of cybersecurity work. This is where we have a significant shortage in talent.
- There is a massive convergence of cyber and physical systems. This is changing the game. Adversaries understand it better than we do.
- Cyber-resilient systems depend on secure systems engineering and secure coding. Cyber resiliency is a subset of systems resiliency. It's all about systems and engineering. Legacy systems can be shored up to be secure, but that is just a temporary fix.

IV. Community Progress Reports

Technology

- a. Working Group Update
 - Transform Learning Process
 Co-chair: Mike Morris, Western Governors University
 - Mike Morris is a new co-chair to the Transform Learning Process
 Working Group. Mike is Associate Dean and Senior Director at Western Governors University.
 - The Transform Learning Working Group is focusing on implementing
 Objective 2.6 of the NICE Strategic Plan to "champion the development and recognition of teachers, faculty, and instructors as part of the indemand workforce".
 - The project team is looking to contribute to the discussion on qualified cybersecurity, education, workforce gap, and identify equitable hiring retention, as well as best practices in education and training institutions.
 - The team is surveying National Centers of Academic Excellence in Cybersecurity schools. The team is asking questions like "Do they have the number of qualified instructors teaching their courses? What is the impact if they don't? If not, what actions are they taking to fill those gaps?". They have found that numerous schools lack the necessary educators. Institutions struggle with recruitment due to instructors' insufficient background or education. Even if suitable educators are located, the institutions often lack the funds to offer a substantial monetary incentive.

- The Use of Performance-Based Assessments to Measure Cybersecurity Competencies Project Team published the <u>Landscape of Performance-Based Assessments in Cybersecurity Green Paper</u>.
- Website: https://www.nist.gov/itl/applied-cybersecurity/nice/community/community-coordinating-cybersecurity/nice/community/community-coordinating-council/transform-learning-process
- Next meeting: April 9, 2024, at 2:00 p.m. ET

ii. Modernize Talent Management Lead: Marian Merritt, NICE

- The project team has been working on a talent survey. The team hopes to get at least 200 respondents who are either HR professionals, cybersecurity individual contributors, or cybersecurity managers.
- The survey contains questions intended to highlight factors that are
 missing in their work environment and factors that they are proud of,
 contributing to people's good feelings about their job and workplace. It
 also aims to understand people's intentions regarding their own
 careers.
- Website: https://www.nist.gov/itl/applied-cybersecurity/nice/community/community-coordinating-council/modernize-talent-management
- Next meeting: April 18, 2024, at 1:00 p.m. ET

b. Community of Interest Update

- i. Cybersecurity Career Ambassadors
 Co-chairs: Rasha Horn, Critical Infrastructure; Jefferson Grace, Critical Infrastructure; Karl Sickendick, United States Air Force
 - During the March monthly meeting, the group reviewed the new NICE Framework Components v1.0.0 and had a special guest speaker, Tasha Carroll, Deputy Director of 90th Cyberspace Operations Squadron.
 - The group is organizing the Ambassador Program by regions across the US. They are starting to focus on targeting colleges and universities.
 They plan to match individuals with mentors who are having trouble obtaining entry level jobs.
 - There is a significant frustration regarding the process of entering cybersecurity careers, encompassing not only cybersecurity but the broader field as well. Education stands out as a crucial aspect of this process. Additionally, certification and experience are emphasized, yet there exists a disparity between what is considered entry-level and the actual requirements.
 - It is imperative to be forthright in job postings and specifications, aligning expectations with reality. This transparency extends to

- educating businesses, particularly HR professionals, about reasonable job criteria.
- The Community of Interest community of interest serves the purpose of addressing these issues. The pervasive concern revolves around the challenge of securing cybersecurity jobs.
- Lieutenant Colonel Karl shared his experience in the U.S. Air Force.
- Federal hiring standards dictate that individuals must meet specific criteria related to experience and education. However, when recruiting for cyberspace operations in the Air Force, there's a desire to hire individuals who may not fit the typical federal mold, presenting challenges.
- In the Community of Interest, they've observed a need for mentorship among cybersecurity career ambassadors. These ambassadors are enthusiastic about sharing insights into cybersecurity careers but also seek guidance and connections within the industry.
- The Community of Interest is facilitating mentorship connections between those seeking guidance and those willing to provide it. For individuals who serve as mentors and presenters within their respective communities, metrics are being gathered, including participant numbers, demographic information, and the capacity to disseminate presentation materials more broadly.
- Website: https://www.nist.gov/itl/applied-cybersecurity/nice/community/community-coordinating-council/cybersecurity-career
- Next meeting: April 12, 2024, at 1:00 p.m. ET
- ii. NICE Framework Users Group Lead: Michael Prebil, NICE
 - The NICE Program Office has had an exciting month, particularly with the release of updated NICE Framework components on March 5th.
 These components comprise the data elements structured within the NICE Framework, marking a significant advancement.
 - The NICE Framework Users Group will host an open call on Wednesday, March 27 at 2 p.m. ET, 11 a.m. PT.
 - During the meeting, Mike will be covering the intent, content, and format of the updated NICE Framework components. The remainder of the session will be dedicated to addressing questions, comments, and fostering open discussion.
 - <u>Learn more</u> on how to join the NICE Framework Users Group.

c. Project Progress Reports

 NICE K12 Cybersecurity Education Conference (San Antonio, Texas) – December 9-10, 2024

Presented by Felicia Rateliff, iKeepSafe

URL: https://www.k12cybersecurityconference.org/

- The conference theme is "Spurring Collaboration in K12 Cybersecurity Education".
- The conference venue is La Cantera Resort. Room rates are \$143 plus resort fee of \$39 per night. Learn more here.
- Call for proposals opens Tuesday, April 9, 2024, and closes Tuesday, June 11, 2024. Learn more here.
- Contact information: Felicia Rateliff, <u>K12Cybercon@ikeepsafe.org</u>.
- ii. US Cyber Games

Presented by Jessica Gulick, Katzcy

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

- Season four of the US Cyber Team recruitment season starts on May 31st and is focused on learning cybersecurity skills through playing games and fostering high-performing teams.
- The integration of e-sports athletics and cybersecurity aims to move towards team-based competitions rather than individual performances.
- Athletic programs' practices are blended with cybersecurity knowledge areas to create a unique and competitive environment, appealing not only to players but also spectators.
- Individuals can apply to be a coach or mentor, play in Capture the Flag, try out for US Cyber Team, or become a sponsor. Learn more here.
- Katzcy is commissioning the first ever US Women's Team. The
 team will be traveling to Tokyo, Japan to compete against Japan
 and the United Kingdom. Katzcy hopes the creation of this women's
 team encourages more women and girls to participate in the US Cyber
 Games Program and the US Cyber Team.

V. Featured Topic

NICE Framework Components V1.0.0

Presented by Karen Wetzel, NICE Framework Manager

URL: https://www.nist.gov/news-events/news/2024/03/unveiling-nice-framework-components-v100-explore-latest-updates-today

• The <u>NICE Framework</u> was updated in 2020 to improve consistency, clarity, and alignment with current industry standards.

- On March 5, 2024, the NICE Program Office released the NICE Framework Components V1.0.0. The updated components include updated Work Role Categories and new Work Roles, such as Insider Threat Analysis.
- Updates included over 11 new Competency Areas, including AI Security, Cryptography, and OT Security. The NICE Framework introduces new Competency Areas to extend its capabilities into emerging areas or those spanning multiple work roles.
- Additionally, over 2,000 Task, Knowledge, and Skill (TKS) Statements were updated, with a focus on improving clarity and consistency. The updates emphasized skills-based hiring, aiming to develop skills early on for individuals.
- Work Role Categories were revised for better understanding, with language familiar to cybersecurity professionals, including federal-specific categories like Investigation and Cyberspace Intelligence.
- Work Role names were updated to avoid sounding like job titles, emphasizing that a single job may comprise multiple Work Roles.
- The NICE Framework's use in job descriptions is highlighted to improve hiring processes, providing transparency, and aiding in the assessment of candidates' skills. The NICE Framework also supports assessment in education and training, facilitating a skills-based approach to learning and evaluation.
- Resources have been updated and are available through the <u>NICE Framework Resource</u>
 <u>Center</u>, including guides, <u>NICE Framework History and Change Logs</u>, and <u>Change Request</u>
 <u>FAQ</u>.
- The NICE framework Users group has an open call on Wednesday, March 27, 2024, from 2:00-3:00pm ET. Email NICEframework@nist.gov to obtain meeting information.

VI. Closing Remarks and Next Meeting Reminder

The next NICE Community Coordinating Council Meeting will be April 23 at 3:30 p.m. ET.

Upcoming Meetings:

- NICE Transform Learning Process WG: April 9, 2024, 2:00-3:00PM ET
- NICE K12 Cybersecurity Education COI: April 11, 2024, 3:30-4:30PM ET
- NICE Apprenticeships in Cybersecurity COI: April 12, 2024, 11:00-12:00PM ET
- NICE Cybersecurity Career Ambassadors COI: April 12, 2024, 1:00-2:00PM ET
- NICE Diversity and Inclusion COI: April 12, 2024, 2:00 3:00PM ET
- NICE Promote Career Discovery WG: April 17, 2024, 3:30-4:30PM ET
- NICE Modernize Talent Management WG: April 18, 2024, 1:00-2:00PM ET
- NICE Cybersecurity Competitions COI: April 19, 2024, 2:00-3:00 p.m. ET

Upcoming Events:

- NICE Webinar Series
 - Reintegrating Justice-Involved Individuals into Cybersecurity Careers April 17, 2024, 2-3PM ET

- Youth Apprenticeship Week: May 5-11, 2024
- 34th Annual FISSEA Conference: May 14-15, 2024
- Cybersecurity Career Week: October 14-19, 2024
- National Apprenticeship Week: November 18-24, 2024
- NICE K12 Cybersecurity Education Conference: December 9-10, 2024, San Antonio, Texas
- NICE Events <u>Calendar</u>