NICE Community Coordinating Council Meeting Agenda

Date: February 24, 2021   Time: 3:15-5:00 p.m. ET

I. Introduction and Ground Rules -
Susi Barraza, NICE Program Manager

II. Opening Remarks

a. Industry Co-Chair - Jon Brickey, Senior Vice President, Mastercard

b. Academic Co-Chair - Marni Baker-Stein, Chief Academic Officer and Provost, Western Governors University

c. Government Co-Chair - Rodney Petersen, Director of NICE

III. Standing Items

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

   Cybersecurity Inclusive Pathways toward Higher Education and Research (CIPHER)

   Presented by Dr. Hongyi "Michael" Wu, Director, School of Cybersecurity, Old Dominion University

   URL: https://www.odu.edu/news/2020/9/school_of_cybersecur?utm_campaign=HP-Slider#.X3IwYJNKgUF

b. Report Roundup - Learning from Good Ideas

   NASCIO Cybersecurity Study

   Presented by Meredith Ward, Director, Policy & Research, National Association of State Chief Information Officers (NASCIO)

   URL:
   https://www2.deloitte.com/content/dam/insights/us/articles/6899_nascio/DI_NASCIO_interactive.pdf

Goal #2: Transform Learning to Build and Sustain a Diverse and Skilled Workforce

Promote cybersecurity career awareness and discovery to diverse stakeholders

NICE Strategic Plan

Hongyi Michael Wu

Building Cybersecurity Inclusive Pathways towards Higher Education and Research (CIPHER)

School of Cybersecurity
Old Dominion University

Demands and Challenges

❖ Pressing need for a large, competent cybersecurity workforce

❖ Challenge: although many universities have established cybersecurity degrees, concentrations and certificate programs, there exists a significant gap between K-12 and college education in cybersecurity
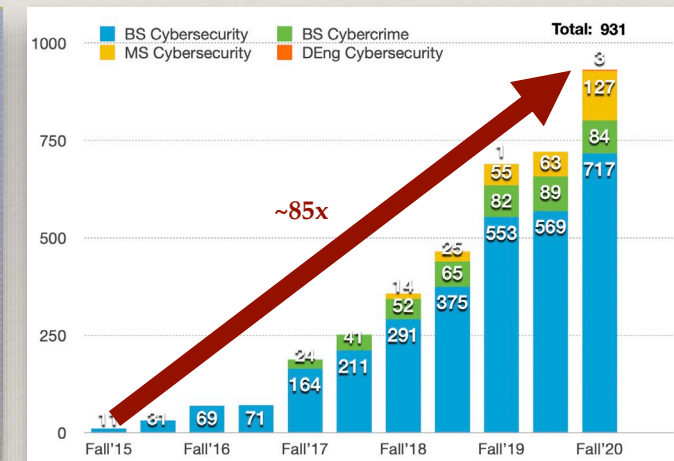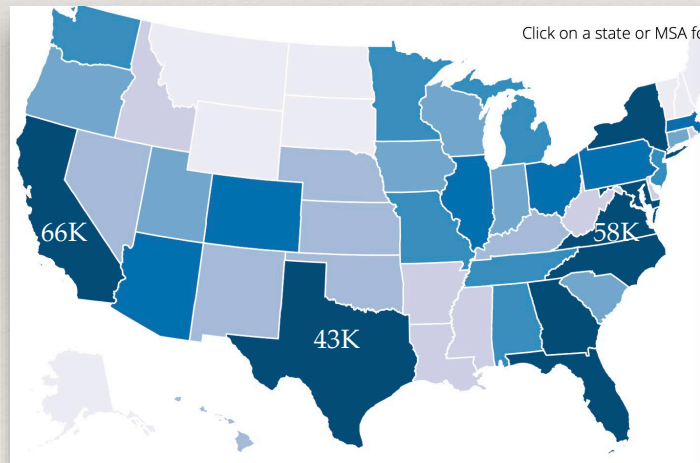
Challenges to Achieve Diversity and Inclusion

- **Challenges in implementation**: Where to fit it into the K-12 curricula? How to ensure time allocation? How to ensure resources and infrastructure in different schools?

- **Challenge in student access**: How to ensure students with different socioeconomic status (SES) to have equal access to curricula, teachers, resources and infrastructure needed for cybersecurity education? How to assess students and support student mobility (especially for the areas with high concentration of low SES students and military families)?

- **Challenge in teacher preparation**: How to ensure teachers to have access to solid cybersecurity curriculum and learning resources? How to prepare competent teachers to have sufficient knowledge to teach learning modules and increase students' interest in cybersecurity?

- **Challenges in partnership and coordination**: At the present time, there are no standardized articulations between elementary schools, middle schools, high schools, community colleges and four year universities; no guarantee that all the teachers adhere to one philosophy regarding the teaching of cybersecurity; no guarantee that students at the same grade level are introduced to the same academic content and skills

Project Goals and Progress

- The project aims to pave the way for a national alliance for building Cybersecurity Inclusive Pathways towards Higher Education and Research (CIPHER)

  - Establishment of a CIPHER researcher-practitioner partnership that engages all stakeholders

  - A series of meetings and workshops to gain a deep understanding of the current gap in curricula and learning resources, the current diversity and inclusion profile, inconsistency of programs, lack of articulation, teachers' competence, infrastructure, and partnership and coordination between schools and institutions

  - Create clear road maps for research, education, outreach and diversity, and identify pilot programs to be carried out during the first two years

  - Development of systematic approaches to inclusive K-16 cybersecurity education

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2020 Deloitte-NASCIO Cybersecurity Study

States at Risk: The Cybersecurity Imperative in Uncertain Times

Meredith Ward

2.24.2021

2010
A call to secure citizen data and inspire trust
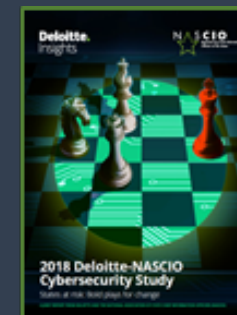
2012
A call for collaboration and compliance

2014
Time to move forward

2016
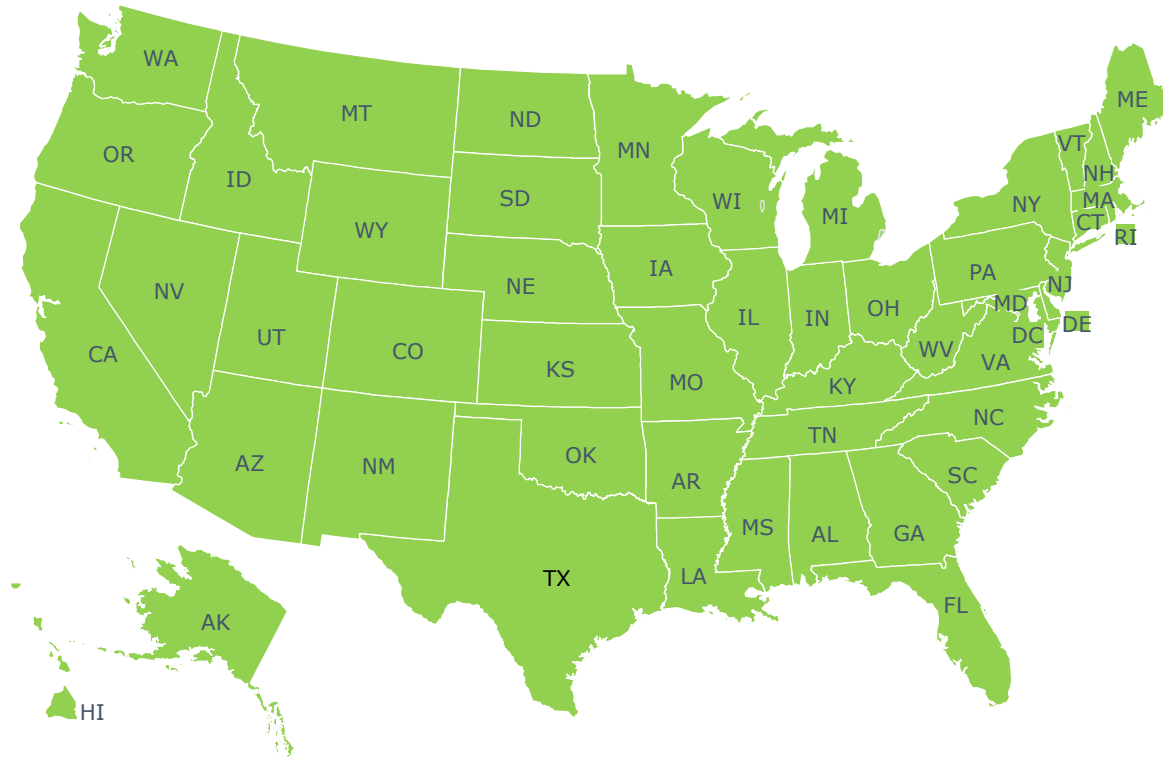Turning strategy and awareness into progress

2018
Bold plays for change

2020
The cybersecurity imperative in uncertain times

All 50 States and D.C. Participated

NASCIO
Representing Chief Information Officers of the States

The 2020 Deloitte-NASCIO Cybersecurity Study

States at risk: The cybersecurity imperative in uncertain times

Key takeaways:

- COVID-19 has challenged continuity and amplified gaps

- Connecting the cyber dots across state, local, and higher education

- Strength, consistency, and enforcement in numbers

Deloitte.
Insights

N A S C I O
Representing Chief Information
Officers of the States

2020 Deloitte–NASCIO Cybersecurity Study
States at risk: The cybersecurity imperative in uncertain times
A JOINT BIENNIAL REPORT (6TH EDITION) FROM DELOITTE AND THE NATIONAL ASSOCIATION OF STATE CHIEF INFORMATION OFFICERS (NASCIO)

Leading outsourced cyber functions

2020 vs. 2018

60% Cyberthreat risk assessments — +17%

42% Security operations center — +4%

40% Forensics/legal support — +8%

States' plan to close the cybersecurity competency gap
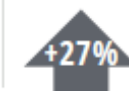
2020 vs. 2018

94% Provide training to staff who are developing the required competencies — +31%

69% Use specialist augmentation (e.g., consultants and contractors) — +66%

51% Contracting with a managed security services provider — +44%

40% Outsource certain functional areas — +27%

LET'S BE FRIENDS
FOLLOW US

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in NASCIO

www.nascio.org/stateofcyber

mward@nascio.org

NASCIO
Representing Chief Information Officers of the States

16

III. Standing Items

c. **Framework Feature - Applications and Uses of Workforce Framework for Cybersecurity**
NICE Framework Success Stories
Presented by Karen Wetzel, Manager, NICE Framework

URL: https://www.nist.gov/itl/applied-cybersecurity/nice/nice-framework-resource-center/success-story-catalog

d. **Research Review - Highlighting Research Results or Topics for Further Study**
Cybersecurity Skills Journal: Practice and Research
Presented by Laurin Buchanan, Secure Decisions

URL: https://www.nationalcyberwatch.org/cybersecurity-skills-journal-practice-and-research/
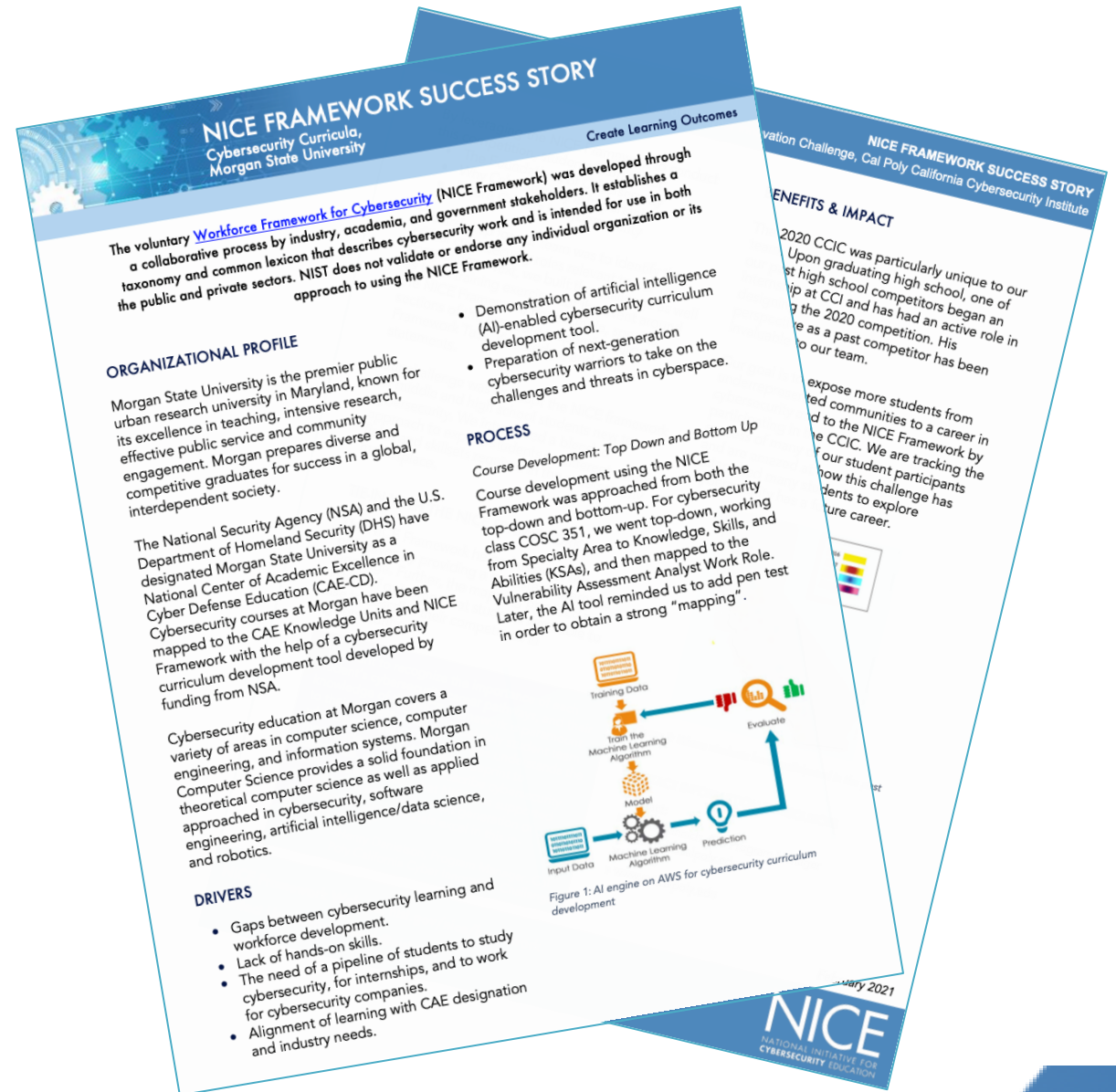
Framework Feature: Success Stories

Karen A. Wetzel

Manager of the NICE Framework

NICE FRAMEWORK SUCCESS STORIES

▶ Organizational Profile
▶ Drivers
▶ Process
▶ Tie in with the NICE Framework
▶ Benefits & Impact

Your Next Steps

Visit the NICE Framework Resource Center to read the newest Success Stories: www.NIST.gov/NICE/Framework

Contribute your Success Story idea or submit it using the template and guidance online: niceframework@nist.gov

Join the NICE Framework Users Group to discuss and learn more!

Questions? Contact me at karen.wetzel@nist.gov

NICE
NATIONAL INITIATIVE FOR
CYBERSECURITY EDUCATION

III. Standing Items

c. Framework Feature - Applications and Uses of Workforce Framework for Cybersecurity
NICE Framework Success Stories
Presented by Karen Wetzel, Manager, NICE Framework

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Cybersecurity Skills Journal: Practice and Research
Presented by Laurin Buchanan, Secure Decisions

URL: https://www.nationalcyberwatch.org/cybersecurity-skills-journal-practice-and-research/

NICE Strategic Plan Goal #5:

Drive ~~Research~~ *Systematic Investigations* on Effective Practices for Cybersecurity Workforce Development

Laurin Buchanan, CISSP - Principal Investigator, Secure Decisions
https://www.securedecisions.com

Associate Editor for Practice, Cybersecurity Skills Journal
https://csj.nationalcyberwatch.org

- Collaborate with stakeholders to **research and disseminate results** on factors that influence the impact of cybersecurity education, training, and workforce development

- Inspire bold investigation of critical societal and global issues impacting cybersecurity education and workforce, **synthesizing data-driven evidence**, and providing trustworthy advice

- Prioritize research on the most **effective and proven practices** for blending successful learning practices across education, training, and workforce development settings

- **Utilize research results** to inform programs and curriculum design, foster continuous learning opportunities, impact learner success, and ensure equitable access
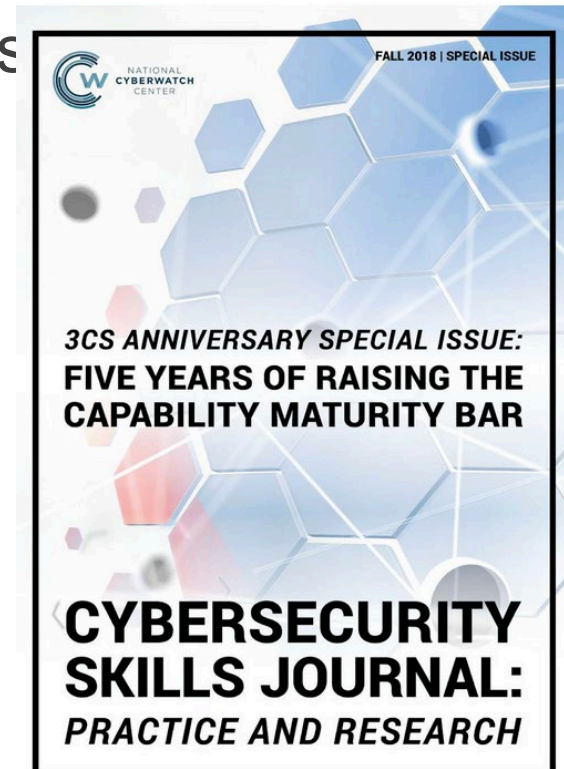
➢ Cybersecurity community lacks experience designing, conducting and documenting evidence-based studies into human factors and performance

➢ Leverage lessons learned by research in other domains like healthcare, aviation, STEM: *stop reinventing the wheel*

➢ Identify what works, why and under what conditions: *replicate successes*

➢ Share what didn't work: *learn from our failures*

➢ Disseminate results more widely

- – Publish conference presentations
- – Remove barriers to expensive scholarly research journals

Cybersecurity Skills Journal

Stimulate professional discussion and advance the interdisciplinary field of cybersecurity -- by integrating and expanding methods, processes, and evidence of **effective practices** which underlie **skilled performance**

Seeking studies on Practice, Research and Education topics

➢ Advance current understanding or capability of humans in the cybersecurity loop

➢ Analyze, evaluate, improve, and measure techniques, tactics and procedures (TTPs)

➢ Design and deployment of instructional systems that raise capability maturity

FALL 2018 | SPECIAL ISSUE

**3CS ANNIVERSARY SPECIAL ISSUE:
FIVE YEARS OF RAISING THE
CAPABILITY MATURITY BAR**

**CYBERSECURITY
SKILLS JOURNAL:
PRACTICE AND RESEARCH**

NOVEMBER 2020 | SPECIAL ISSUE
DIGITAL ONLINE FIRST EDITION

NICE FRAMEWORK SPECIAL ISSUE:
INVESTIGATING FRAMEWORK
ADOPTION, ADAPTATION,
OR EXTENSION

CYBERSECURITY
SKILLS JOURNAL:
PRACTICE AND RESEARCH

Published with the 2020 NICE Conference

➢ 162 practitioner & scholar volunteer peer reviewer

➢ 40 authors submitted abstracts

Perspectives on practice, research and teaching

➢ Competency health and maturity in an organization

➢ Wireless security

➢ Non-technical Knowledge, Skills and Abilities

➢ Cognitive processes and cyber defender proficiency

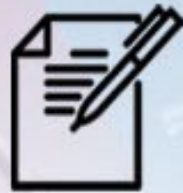➢ Cybersecurity Intelligence

➢ Cybersecurity education

https://www.nationalcyberwatch.org/resource/csj-2020-nice-special-issue/

CYBERSECURITY SKILLS JOURNAL

SPECIAL ISSUE: DIVERSIFYING THE CYBERSECURITY WORKFORCE

Idea → Submit an Abstract → Get Assigned a Team → Get Published

Call for Abstracts:
https://nationalcyberwatchcenter.wildapricot.org/event-4157377

Diverse perspectives are essential for driving innovation and addressing the critical cybersecurity skills gap.

Do you have models, data, systematic review, cases, or instructional designs that suggest how our nation can succeed in diversifying the cybersecurity workforce?

CSJ is seeking proposals or reports on systematic and rigorous investigations of the contributing causes, mediating or moderating influences, and evidence-based solutions for diversifying the cybersecurity workforce.

Articles. Support replication, validation, and generalization of practice, systematic investigation, and instructional methods and results (7,500 - 15,000 words)

Notes. Explore uncharted territory, rather than seeking to confirm or disconfirm the results of prior literature as is done in an article (1,000 - 2,500 words)

Dialogues. Capture a discussion among stakeholders about dilemmas or previously insurmountable challenges to cybersecurity skill assessment, development, recruitment, or evaluation

Problem. What is the primary problem that the study investigated? Why is this an urgent and/or severe problem?

Research question. What questions related to the problem have not been answered by prior systematic investigations? Why are practitioners or prior systematic investigations lacking an understanding of the phenomenon being studied?

Contribution to the conversation. What is the contribution made by this manuscript to a current conversation in the literature? Why are the concept relationships, method, findings, or conclusions surprising or contributing new and important insights?

Submit your idea:
https://nationalcyberwatchcenter.wildapricot.org/event-4157377/Registration

CSJ Diversity SI Process / Timeline

Join the CSJ community!

Learn more at the next Paper Development Workshop:

February 26th at 4:00 pm (EST)

https://nationalcyberwatchcenter.wildapricot.org/event-4161698

--additional dates in coming months--

Sign up to be a Peer Reviewer!

https://nationalcyberwatchcenter.wildapricot.org/event-3018629

--mentoring workshops to be held in March and April--

Questions? laurin.buchanan@securedecisions.com

IV. Working Group Updates

a. Promote Career Discovery
James Baker, Account Coordinator, Cybersecurity Evangelists; or Roland Varriale II, Cybersecurity Analyst, Argonne National Laboratory

b. Transform Learning Process
Dr. Aurelia T. Williams, Interim Vice Provost for Academic Administration, Norfolk State University: or Richard Spires

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

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

b. Cybersecurity Skills Competitions
    Amelia Phillips, Highline College; or Brad Wolfenden, EmberSec

c. K12 Cybersecurity Educators
    Terrance Campbell, CCTE Cybersecurity Teacher, Shelby County Schools; or Laurin
    Buchanan, Secure Decisions

d. NICE Framework Users
    Karen Wetzel, Manager of the NICE Framework

VI. Project Progress Reports

a. NICE Conference and Expo
   Presenter: Randy Pestana, Florida International University
    URL: httpas://niceconference.org/

b. NICE K12 Cybersecurity Education Conference
   Presenter: Felicia Rateliff, Director of Operations & Programs, iKeepSafe
   URL: https://www.k12cybersecurityconference.org/

c. Centers of Academic Excellence (CAE) in Cybersecurity Community
   Presenter: Tony Coulson, California State University, San Bernardino
   URL: https://www.caecommunity.org/

To dial in by phone, dial one of the following numbers, enter the participant PIN followed by # to confirm:+1 (415) 466-7000, PIN 1675270 # | +1 (760) 699-0393, PIN 7500851098 #

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WHY VIRTUAL?

In an effort to be mindful of the continued disparate impacts of COVID-19, iKeepSafe, together with NICE has

decided to make the 2021 conference virtual again this year due to the following reasons:

- **Continued commitment to equity and inclusion**

- **The safety and security of our attendees and stakeholders**

- **Travel restrictions**

- **Budgetary restrictions**

KEY DATES

- THURSDAY, MARCH 25 - FIRST PLANNING COMMITTEE MEETING

- EARLY TO MID APRIL – CALL FOR SPEAKER PROPOSALS OPENS

- LATE JUNE – CALL FOR SPEAKER PROPOSALS CLOSES

- MID AUGUST – EARLY-BIRD REGISTRATION OPENS, AGENDA GOES LIVE

- LATE OCTOBER – EARLY-BIRD REGISTRATION CLOSES

- DECEMBER 4-5 – PRE-CONFERENCE WORKSHOPS

SPONSOR & EXHIBIT

Sponsor Level & Benefits	TERABYTE $5000 (3 available)	GIGABYTE $3500 (10 available)	MEGABYTE $2000 (20 available)	GENERAL $1000 (unlimited)
Complimentary registrations	✓ (6)	✓ (4)	✓ (3)	✓ (2)
Logo on website and app sponsor pages	✓	✓	✓	✓
Complimentary Exhibitor Showcase virtual table on Whova conference platform	✓	✓	✓	✓
Email list of opt-in conference attendees	✓	✓	✓	
Logo on pre-conference email blasts & social media	✓	✓		
Ability to add items to virtual attendee goodie bag	✓	✓	✓	✓
Branded Track & Zoom room (Example: "Track 2, Sponsored by Master-Card")	✓			

YEAR-ROUND MISSION SPONSOR

mastercard.

EXHIBITOR VIRTUAL BOOTH:

$750 – For-Profit Companies
$500 – Non-Profit Orgs

Email **conference@ikeepsafe** for more info

REGISTRATION

REGISTRATION PRICING WILL REMAIN AT:

$125 EARLYBIRD/GOVT

$150 REGULAR PRICE

QUESTIONS/IDEAS

FOR QUESTIONS, COMMENTS, IDEAS..

CONTACT FELICIA RATELIFF

conference@ikeepsafe.org

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VII. Closing Remarks and Next Meeting Reminder

Next NICE Community Meeting: Wednesday, March 24, 2021 at 3:30 p.m. ET