National Cybersecurity Career Awareness Week

2018
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Report

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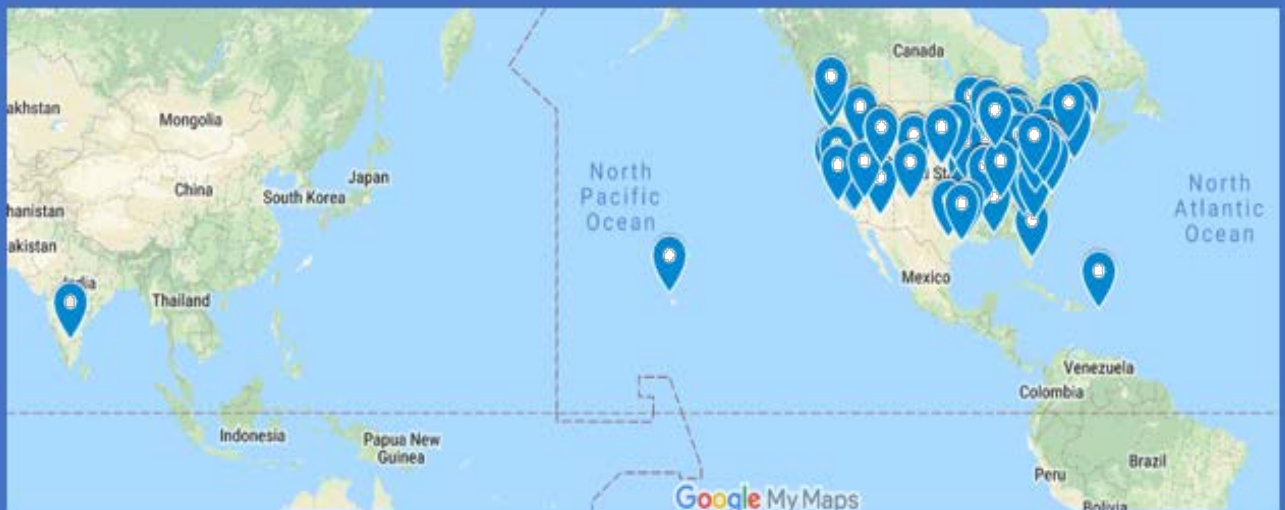
2018 NATIONAL CYBERSECURITY CAREER AWARENESS WEEK:

EVALUATION SUMMARY

National Cybersecurity Career Awareness Week (NCCAW) focuses local, regional, and national interest to inspire, educate, and engage citizens to pursue careers in cybersecurity. NCCAW takes place during November's National Career Development Month. Each day of the campaign provides an opportunity to learn about the contributions and innovations of cybersecurity practitioners and the plethora of job opportunities that can be found when exploring cybersecurity as a career choice. During the week, learners of all ages, educators, parents, employers, and the community participate in a national recognition of how cybersecurity plays a vital role in the lives of Americans and how building a national cybersecurity workforce enhances America's national security and promotes economic prosperity.

Key Messaging

- Create excitement around increasing public awareness and engagement in building a strong cybersecurity workforce.
- Emphasize the demand and opportunities in the field of cybersecurity.
- Increase awareness around the multiple career options within the field of cybersecurity.
- Highlight the numerous pathways to enter the cybersecurity career field.
- Showcase resources and programs, including those that increase participation of women, minorities, veterans, persons with disabilities, and other underrepresented populations in the cybersecurity workforce.

Highlights

EVENTS: Over 200 engagements directly impacting over 7500 people, in 43 states and the District of Columbia and Puerto Rico. Activities were also held in Bengaluru, Karnataka-India and Halifax, Nova Scotia-Canada.

SOCIAL MEDIA: A variety of videos, webinars, blog posts, Tweets, and Twitter Chats were broadcast throughout the week highlighting the opportunities for a career in cybersecurity.
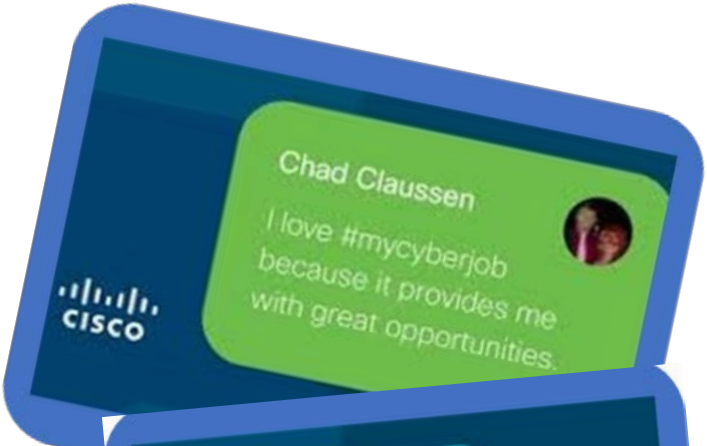
Activities

A diverse and creative array of events and activities occurred throughout the country during NCCAW, including company open houses, forums, discussions, speaker events, career fairs, and presentations at schools and community and technical colleges.
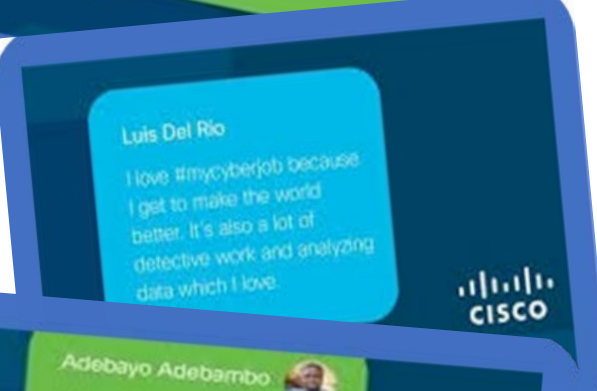
States, local government, local educational agencies, and cybersecurity/IT organizations shared information to their own constituents.

A wide range of resources and interactive activities were developed by multiple stakeholders and added to the NCCAW Toolkit on the NICE NCCAW website.
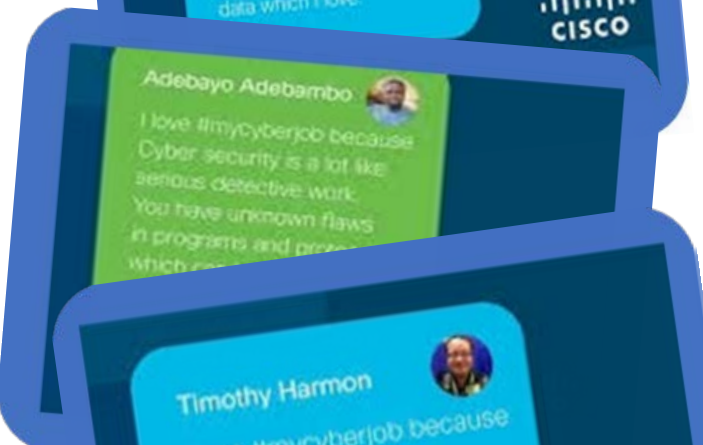
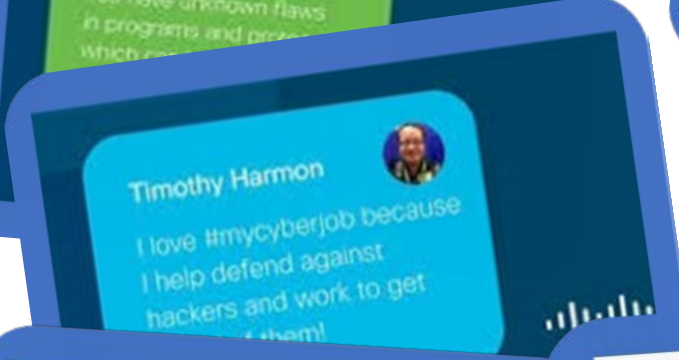**Industry had their employees share their story about a career in cybersecurity**

Partners used social media to promote NCCAW.

Partner organizations supported through Facebook and other social media

Partners hosted Twitter chats
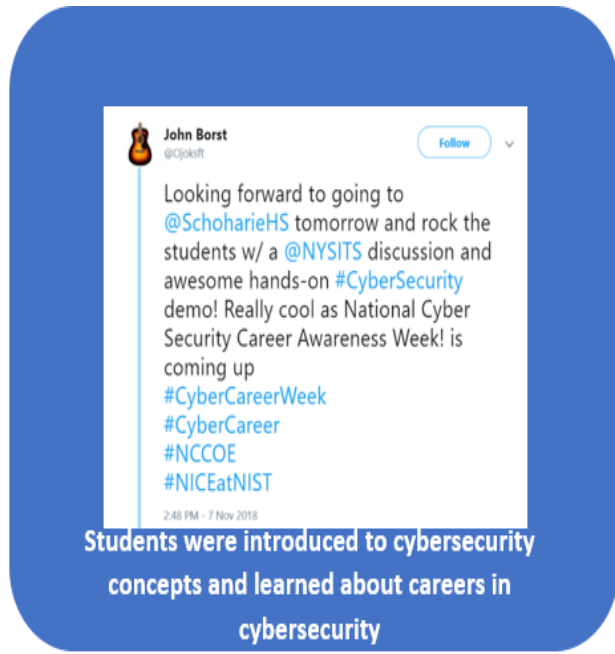
Students were introduced to cybersecurity concepts and learned about careers in cybersecurity

Numerous webinars covered a wide range of topics to include different cybersecurity career pathways, recruiting and retaining women to the field, and an overview of certification options.

Articles and …

Blogs were written

Partners developed resources for participants to engage in during NCCAW

12-17 November

National Cybersecurity Career Awareness Week
2018

National Cybersecurity Career Awareness Week is here!

#CYBERCAREERWEEK | #MYCYBERJOB

FREE RESOURCES FOR LEARNERS

National Cybersecurity Career Awareness Week (NCCAW), brought to you by the National Initiative for Cybersecurity (NICE), is an exciting way to increase awareness about careers in cybersecurity and help build a national cybersecurity workforce to enhance America's security and promote economic prosperity.

Visit the NCCAW Toolkit for resources to help you encourage awareness and exploration of cybersecurity careers. In addition, explore some fantastic resources below to introduce students and young adults to the cybersecurity field.

Nepris: Interactive Cybersecurity Career Virtual Engagements

November 12-17, 2018

Bring your classroom to one of several online cybersecurity career presentations. Learn from professionals in the field. Have students ask questions and learn about what a career in cybersecurity includes and what pathways are possible.

- *Cyber Ranges & Assessment Tools*: Lee Rossey, SimSpace

- *Becoming a Cybersecurity Systems Engineer:* Tina Caldarone, Cisco Systems

- *How to Protect Against Cyber Threats*: Mark Loepker, Cyber Center for Education & Innovation

- *How to Make Cybersecurity Your Career*: Michael Telfeyan, Samsung Austin Semiconductor

- *Preparing for your Future Cyber Career:* Chuck Gardner, National Integrated Cyber Education Research Center
- *How to Become a #CyberBoss*: Tina Williams-Koroma, TCecure, LLC
- *Modern Cryptography for K12:* Justin Troutman, PocketBlock

Attend one of the [Nepris Cybersecurity Career Presentations](#)

Circadence Mini Games: Port Flow, Perplex, Cypher, Cyber Vault, and Cylitare

November 12-17, 2018

Allow students to explore the Circadence Mini-Games!

Circadence hosted more than 20 interns over the summer to develop fun and engaging applications that focused on cybersecurity awareness training using game-based activities. Explore these student-driven and developed applications and experience how cyber training can engage and enlighten both cyber experts and enthusiasts!

Are you a cybersecurity whiz? If so, **Perplex** is for you. This multiplayer, time-based trivia game were players race against the clock and each other to answer cybersecurity trivia questions and collect points.

Unlock cybersecurity mysteries with **Cypher**, an encryption game that uses a movable Alberti Cipher disk to "decode" cybersecurity concepts and theories into readable encrypted messages. Players learn the basics of the industry while challenging their current knowledge of fundamental topics.

Port Flow is designed to reinforce common ports and protocols used in the Internet. Players draw connections between the correct port and protocol while using each square in the puzzle.

CyberVault is designed to reinforce the process of converting numbers between decimal, binary, and hexadecimal. This game includes an imbedded tutorial on hints for base conversion.

Cylitaire is loosely based on the classic card game of Solitaire. Each "card" represents a phase in a cyber intrusion kill chain and contains information about an attack, technique, or tool used in the respective phase.

Explore the [Circadence](#) Mini-Games

InfoSec Institute: Boost Your Cybersecurity Career with These Free Resources

November 12-17, 2018

Explore these great resources to help you kickstart — or sharpen — your cybersecurity career.

Developed for grades K-12, this online module explains the cybersecurity skills shortage and encourages students to pursue a career in this growing field. It tackles industry stigmas and stereotypes head-on by outlining what cybersecurity professionals do and the wide-variety of roles they can fill. The module also includes tips to help students prepare for a career in the field, including taking online courses, finding a mentor and participating in competitions like the Global Cyber Olympics.

Discover your favorite job cybersecurity profile. Each includes: a job description, responsibilities, duties, related certifications, hard skills, soft skills, degree/education requirements, salary information, job outlook information, current job listings, related articles, and a plethora of other relevant information.

Explore InfoSec Institute

Air Force Association's CyberPatriot: The National Youth Cyber Education Program

November 12-17, 2018

Have your students learn more about cybersecurity careers and the skills used as a cybersecurity professional by having them engage with Security Showdown 2, JeffOS, or Packet Protector.

Learn more about the CyberPatriot National Youth Cyber Education Program

PocketBlock: Pockenacci

November 12-17, 2018

Currently, there's a massive gap between classical cryptography and modern cryptography, in regard to its "teachability" to K-12; this is because of the mathematical understanding that's required once you reach modern algorithms, such as those used in practice today. The open-source project (PocketBlock) scales down modern cryptography in a way that's as easy to understand and navigate, hands-on, as classical cryptography, but teaches the advanced concepts present in modern cryptography. View the full PocketBlock curriculum, or a sample lesson with Pockenacci.

Explore PocketBlock

Hats and Ladders: Career Exploration and Skills Building Program for Youth Ages 14 to 25

November 12-17, 2018

Use Hats & Ladders, a mobile platform, to motivate youth to explore, experiment with, and prepare for a wide range of career pathways—including *cybersecurity.* Instead of trying to "match" individuals to a single career or cluster, we want to empower youth as career thinkers, capable of making their own connections between who they are, who they want to be, and how to get there.

Explore Hats & Ladders

Comic-BEE: Interactive Cybersecurity Careers Conversation Starter

November 12-17, 2018

Comic-BEE is a web-based technology designed to assist cybersecurity educators and subject matter experts, who are

neither programmers nor artists, to develop web-based branching, graphic stories that are closely aligned with instructional goals.

Use a comic as a 'conversation starter' for your NCCAW activity – learners can read comics individually or in pairs, explore different cybersecurity scenarios and see what happens with different choices, and explore the skills of a cybersecurity practitioner.

Explore at Comic-BEE.

Start Engineering: Cybersecurity Career Guide

November 12-17, 2018
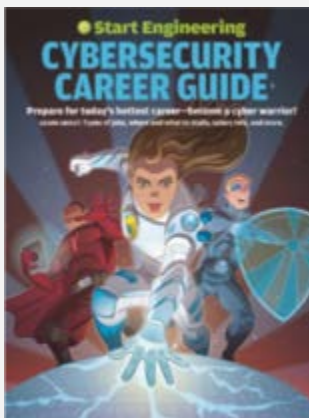
To engage students who fit within the broad spectrum of cybersecurity workforce needs will require more substantive, nuanced ways of talking about the field. Discussion will need to move beyond the common approach of focusing on hardware, networks, and operating systems--it will take integration of cybersecurity content across multiple disciplines. Use the Cybersecurity Career Guide to help students discover and learn:

- What cybersecurity is and why it is an exciting field;

- What cybersecurity career options are available; and

- What are possible pathways to enter the cybersecurity workforce.

Read more about increasing the cybersecurity workforce through the Start Engineering Cybersecurity Careers Blog.

Explore at start-engineering.com

New Resources Were Added to the NCCAW Toolkit

NCCAW Flier	**NCCAW Sample Press Release**	**Sample Proclamation**
Conversation Starters	**Social Media Resources**	**Suggested Activities for NCCAW**
A Dozen Ways to become a Cybersecurity Career Advocate	**NICE Key Messages by Audience**	

Event Planning and Speaker Tools

Suggested Planning Guidelines	**Sample Open House Tips**	**Classroom Speaking Tips**
Sample Career Fair Tips	**Sample Speaker Invite and Tips**	

Resources

Career Poster	**Cybersecurity Career Outlook**	**10 Coolest Jobs in Cybersecurity**
NCCAW Images	**Steps to a Cybersecurity Career**	**Limitless Opportunities Infographic**
Top 4 Jobs in Cybersecurity	**Who Works in Cybersecurity, How We Got Started, Why We Need You**	**Resources from NCCAW Collaborators**

NCCAW Welcomes International Participation

Proclamation

WHEREAS, Cybersecurity Career Awareness Week is a celebration focusing on local, regional, and national interest to inspire, educate and engage learners of all ages, educators, parents, employers and the community on career opportunities in the field of cybersecurity; and

WHEREAS, The week-long celebration provides various activities for learning about the contributions, innovations and opportunities that can be found by exploring cybersecurity as a field of study or career choice; and

WHEREAS, Residents and businesses in Maine during Cybersecurity Career Awareness Week can learn how cybersecurity plays a vital role in our lives and how building a cybersecurity workforce promotes economic prosperity and enhances public safety; and

WHEREAS, The national cybersecurity workforce is expected to experience a shortfall of two million cybersecurity professionals by 2019 and could be filled by local talent if exposed early to available educational resources for career entry.

NOW, THEREFORE, I, PAUL R. LEPAGE, Governor of the State of Maine, do hereby recognize November 12 – 17, 2018, as

Cybersecurity Career Awareness Week

throughout the State of Maine, and urge all citizens to recognize this observance.

In testimony whereof, I have caused the Great Seal of the State to be hereunto affixed GIVEN under my hand at Augusta this ninth day of August Two Thousand Eighteen

Paul R. LePage
Governor

Matthew Dunlap
Secretary of State
TRUE ATTESTED COPY

Governor Paul R. LePage signed the proclamation to the left designating November 12- 17, 2018 as National Cybersecurity Career Awareness Week in the State of Maine.