CERT Division Research Supports National Cybersecurity Awareness Month

September 30, 2020 — The CERT Division of the Software Engineering Institute this week announced its efforts to support National Cybersecurity Awareness Month (NCSAM). Every October since 2004, the U.S. Department of Homeland Security and the National Cybersecurity Alliance have engaged with government, industry, and academia to spread the word about safety and security online. The theme of this year’s NCSAM is “Do Your Part. #BeCyberSmart.” In the month of October, the CERT Division will release information on artificial intelligence network defense evaluation and ransomware, publish blog posts about high-value asset protection and network segmentation, and hold a webcast on threats for machine learning.

Read more »

Selected CERT Cybersecurity Resources
An Updated Framework of Defenses Against Ransomware - White Paper
An approach for defending against Ransomware-as-a-Service (RaaS) as well as direct ransomware attacks.

NICE Framework Cybersecurity Evaluator - White Paper
Assessing members of the cyber workforce within the scope of the NICE Cybersecurity Workforce Framework.

Machine Learning in Cybersecurity: 7 Questions for Decision Makers - Podcast
Key questions managers and decision makers should ask about machine learning to effectively solve cybersecurity problems.

Future of Cyber: Cybercrime - Podcast
David Hickton, founding director of the University of Pittsburgh Institute for Cyber Law, Policy, and Security, talks about the future of cybercrime and secure elections.

SEI News

Graph Algorithms in the Language of Linear Algebra Approaches C++ Standardization
The recent GraphBLAS Template Library (GBTL) release marks a milestone in the development of a C++ specification for graph analytics.

CMU Software Engineering Institute Adds Aztlán CEO Russell Crockett to Board of Visitors
The Board of Visitors advises the CMU president, vice president for research, and the SEI director on SEI plans and operations.

Educators at 17th Annual Workshop School Up on Cutting-Edge Software Engineering and Pandemic Teaching
Participants shared knowledge on software engineering for machine learning, quantum computing, and teaching during the COVID-19 pandemic.

See more news »
**Latest Blogs**

**Insider Threat Incidents: Assets Targeted by Malicious Insiders**
A new taxonomy illuminates the assets targeted in insider incidents.

**8 Steps for Migrating Existing Applications to Microservices**
Organizations can migrate applications safely and effectively.

**Highlights from the 7th Annual National Insider Threat Center (NITC) Symposium, Day One**
Our experts answer questions from the first day of the symposium.

**Balancing Cyber Confidence and Privacy Concerns**
Privacy protocols are impacting organizations' ability to monitor network traffic.

**Insider Threat Incidents: Communication Channels**
Our insider threat taxonomy breaks down insider communication channels.

[See more blogs »](#)

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**Latest Podcasts**

**Quantum Computing: The Quantum Advantage**
Dr. Jason Larkin discusses the challenges of working in the NISQ era and the work that the SEI is doing in quantum computing.

**CMMC Scoring 101**
Andrew Hoover and Katie Stewart, Cybersecurity Maturity Model Certification (CMMC) architects, discuss how assessed DIB organizations are scored according to the model.

**Developing an Effective CMMC Policy**
Andrew Hoover and Katie Stewart, Cybersecurity Maturity Model Certification (CMMC) architects, present guidelines for developing an effective CMMC policy.

[See more podcasts »](#)
Latest Publications

**Static Analysis Classification Research FY16-20 for Software Assurance Community of Practice**
Lori Flynn discusses her research from the past four years.

**Using AI to Find Security Defects in Code / Build More Secure Software**
This presentation discusses how to use AI to find defects in code.

**Using Deep Neural Networks to Detect Compromised Hosts in Large-Scale Networks**
This presentation discusses the generation of a dataset based on real network data fused with actual threat lists and contextual information.

See more publications »

Latest Videos

Webcast - *Cyber Workforce Development and the Cybersecurity Engineer*
Dennis Allen talks about how the SEI's Cyber Workforce Development team aims to streamline the building of cybersecurity expertise and amplify it to a globally distributed workforce.

Webcast - *Follow the CUI: Setting the Boundaries for Your CMMC Assessment*
CMMC architects review several steps for identifying CUI exposure in terms of their critical services and the assets that support them.

Webcast - *Risk Management for the Enterprise—How Do You Get Executives to Care About Your Risks?*
Brett Tucker and Matthew Butkovic discuss the OCTAVE FORTE process.

Upcoming Events
Webcast - Threats for Machine Learning, October 6
Learn where machine learning applications can be attacked, the means for carrying out the attack, and some mitigations you can use.

FloCon 2021, January 11-14, 2021
The theme of Using Data to Defend is more critical than ever, given the security challenges of moving customers and vendors online and supporting a remote workforce.

Artificial Intelligence for Humanitarian Assistance and Disaster Response Workshop, December 11
This workshop establishes dialogue between the AI and Humanitarian Assistance and Disaster Response (HADR) communities.

Note: The SEI is evaluating all upcoming courses, conferences, and events case-by-case in light of COVID-19 developments. Check individual event pages for the latest information.

See more events »

Upcoming Training

Insider Threat Vulnerability Assessor Training
December 8-10, 2020 (SEI, Live online)

Insider Threat Analyst
December 15-17, 2020 (SEI, Live online)

Note: The SEI is evaluating all upcoming courses, conferences, and events case-by-case in light of COVID-19 developments. Check individual training pages for the latest information. You may also contact us at coursesregistration@sei.cmu.edu or +1-412-268-7388.

See more courses »
Employment Opportunities

IT Security Engineer
Senior Research Scientist-Machine Learning
Senior Software Developer

All current opportunities »