SEI Bulletin

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Securing the Supply Chain for the Defense Industrial Base

March 2, 2022 — The new SEI podcast "Securing the Supply Chain for the Defense Industrial Base" features Gavin Jurecko talking with Katie Stewart about risks associated with defense industrial base (DIB) supply chains and how the SEI works with the U.S. Department of Defense to mitigate those risks.

"Small- and mid-sized businesses focus on producing a specific widget or a piece of software," said Jurecko, lead of the SEI's Resilience Diagnostics Team, in the podcast. "Often they don't have the cybersecurity staff to protect the sensitive data that's pushed to them by the larger primes or even the government."

Watch the video on our <u>website</u> or <u>YouTube</u>. Find the SEI Podcast series wherever you get your podcasts: <u>Apple Podcasts</u>, <u>Google Podcasts</u>, <u>TuneIn</u>, <u>SoundCloud</u>, <u>Stitcher</u>, and <u>Spotify</u>.

Read more about supply chains on the SEI Blog.



Anita Carleton Elected Fellow of IEEE

Anita Carleton, director of the SEI Software Solutions Division (SSD) has been elected as a Fellow of IEEE.

SEI Coauthors Responsible AI Guidelines

The new report from the Defense Innovation Unit makes progress towards operationalizing the Department of Defense's Ethical Principles for AI.

See more news »



<u>The Latest Work from the SEI: The Future of Software Engineering, Ethical AI, Cloud Adoption, and Machine Learning</u>

Doug Schmidt summarizes recent SEI publications in machine learning, ethical artificial intelligence, cloud adoption, and mixed-criticality systems.

A Hitchhiker's Guide to ML Training Infrastructure

Jay Palat looks at some hardware factors that impact training AI systems and walks through an example ML workflow.

Two Categories of Architecture Patterns for Deployability

Rick Kazman presents an excerpt from the latest edition of *Software Architecture in Practice*, which discusses deployability and describes two categories of associated architecture patterns.

See more blogs »



Latest Podcasts

<u>Securing the Supply Chain for the Defense Industrial Base</u>

Gavin Jurecko and Katie Stewart discuss risks in defense industrial base

(DIB) supply chains and the SEI's work to mitigate them.

<u>Building on Ghidra: Tools for Automating Reverse Engineering and Malware Analysis</u>

Jeffrey Gennari and Garret Wassermann talk with Suzanne Miller about Kaiju, tools that help analysts take advantage of the NSA's Ghidra framework for malware analysis and reverse engineering.

Envisioning the Future of Software Engineering

Anita Carleton and Forrest Shull discuss the study *Architecting the Future of Software Engineering.*

See more podcasts »



PHITE: Improved Situational Awareness through AI at the Edge

This fact sheet describes the Portable, High-Performance Inference at the Tactical Edge (PHITE) project and how it supports Department of Defense efforts.

<u>DevSecOps Days Washington, D.C. 2021</u>

These presentations were given at at the SEI-hosted, virtual DevSecOps Days conference.

<u>Using Machine Learning to Increase NPC Fidelity</u>

This technical report describes how the authors used machine learning modeling to create decision-making preferences for non-player characters (NPCs).

See more publications »



YouTube - <u>DevSecOps Days Washington</u>, D.C. 2021

Presentations and talks from DevSecOps Days Washington, D.C. 2021.

YouTube - 2021 SEI Research Review

Presentations and talks from the 2021 SEI Research Review.

Webcast - <u>A Cybersecurity Engineering Strategy for DevSecOps</u>
Carol Woody presents a strategy for cybersecurity engineering in DevSecOps environments.



<u>INtersect: Where DoD, Academia, and Industry Meet - Engineering Tactical and Al-Enabled Systems</u>, March 2, 2022, 2 p.m. ET

In this webcast, Grace Lewis and Shane McGraw discuss how the SEI is applying research, through its highly successful Tactical and AI-Enabled Systems (TAS) initiative, to develop foundational principles, innovative solutions, and best practices.

<u>Acquisition Disasters? Ideas For Reducing Acquisition Risk</u>, March 3, 2022, 1:30 p.m. ET

In this webcast, Fred Schenker and Linda Parker Gates discuss the status quo, alternative approaches, and how the community of cyber-physical system acquirers and suppliers can improve.

AADL/ACVIP User Days 2022, May 5, 2022

Speakers at this free forum will present the latest on the Architecture Analysis and Design Language (AADL), the Architecture-Centric Virtual Integration Process (ACVIP), and associated tools.

<u>International Conference on Software and Systems Processes 2022</u>, May 20-22, 2022

This conference gathers researchers and practitioners to share about software and system processes and global software engineering.

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 »



<u>Designing Modern Service-Based Systems</u>

April 25, 2022 (SEI, Live Online)

Documenting Software Architectures

April 26-29, 2022 (SEI, Live Online)

Design Guidelines and Patterns for Microservices

May 2-5, 2022 (SEI, Live Online)

Managing Computer Security Incident Response Teams

May 10-12, 2022 (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 courseregistration@sei.cmu.edu or +1-412-268-7388.

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