

Look for the next SEI Bulletin on July 23.

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Marking 40 Years of Innovation and a Renewed Contract with Defense Department

June 25, 2025 — As the SEI marks 40 years of advancing software as a strategic advantage for national security, the Department of Defense (DoD) this week renewed its contract with Carnegie Mellon University to operate the SEI as a federally funded research and development center. The contract ensures that the institute will keep advancing and transitioning the science, technologies, and practices needed to make software a strategic advantage for the DoD.

“To continue to make a difference for the DoD as the future unfolds means anticipating change and making it work to the DoD’s advantage in its software ecosystem,” said SEI Director and CEO Paul Nielsen. “Our history proves that we are always in position to provide key guidance on the next big thing in software technology in service to the nation.”

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[Secure Software by Design Workshops Announced](#)

The August event will feature workshops on data science for cybersecurity, zero trust, model-based systems engineering, and more.

[Model-Based Systems Engineering in Practice Conference Opens Call for Presentations and Registration](#)

The one-day event in August will bridge the gap between MBSE theory and its real-world practice.

[**See more news »**](#)



[Amplifying AI Readiness in the DoD Workforce](#)

Eric Keylor, Robert Beveridge, and Jonathan Frederick describe a recent partnership with the Department of the Air Force Chief Data and AI Office to develop a strategy to identify and assess hidden workforce talent for data and AI work roles.

[Radio Frequency 101: Can You Really Hack a Radio Signal?](#)

Recent reports indicate the DoD is susceptible to radio frequency (RF) attacks. Roxxanne White and Michael Bragg discuss common RF tools and ways malicious actors can attack systems.

[**See more blogs »**](#)



[The Magic in the Middle: Evolving Scaled Software for National Defense](#)

SEI chief technical officer Tom Longstaff discusses the SEI's long-standing

work to help the DoD rapidly scale technology including artificial intelligence and autonomous systems.

[Making Process Respectable Again: Advancing DevSecOps in the DoD Mission Space](#)

The SEI's Eileen Wrubel and Bill Nichols, with George Lamb of the Department of Defense (DoD), talk about how DevSecOps has become crucial to overall mission success in high-stakes DoD environments where security, efficiency, and speed are critical.

[See more podcasts »](#)



[Latest Publications](#)

[Will Generative AI Fill the Automation Gap in Software Architecting?](#)

James Ivers and Ipek Ozkaya explore the application of generative AI to software architecture, focusing on potential alignment (or lack thereof) of generative AI with the nature of common architecture tasks involved in five common architecture activities.

[Practical Supervised Machine Learning Classification of Highly Imbalanced Text](#)

Austin Whisnant describes a machine learning model used to build a corpus of insider threat data to support insider threat research.

[See more publications »](#)



[Latest Videos](#)

[An Introduction to the MLOps Tool Evaluation Rubric](#)

Violet Turri and Emily Newman discuss the challenges of finding the right tools to support machine learning operations (MLOps) pipelines and introduce the MLOps Tool Evaluation Rubric.

[Demystifying Operational Resilience](#)

Alexander Petrilli and Matthew Butkovic explain why operational resilience

is important and discuss best practices to carry out mission priorities when core operational capacities are affected.

[See more videos »](#)



Upcoming Events

[International Workshop on Envisioning the AI-Augmented Software Development Lifecycle](#), June 26, Trondheim, Norway

This workshop seeks to explore how AI might transform end-to-end software systems development workflows and emphasizes the need to collect relevant data now to assess the long-term effects of AI throughout the software development lifecycle.

Webcast - [DevSecOps: See, Use, Succeed](#), June 26

Hasan Yasar, Vaughn Coates, and David Shepard will discuss the value of observability in DevSecOps to help system developers understand and perform quality attribute tradeoffs and to gain confidence about system performance.

[Secure Software by Design 2025](#), August 19-20, Arlington, Va.

Join thought leaders in secure software by design for presentations and discussions on all aspects of secure software systems development.

[Model-Based Systems Engineering.\(MBSE\) in Practice 2025](#), August 21, Arlington, Va.

Join us to gain practical insights from seasoned MBSE adopters, discover innovative solutions to common challenges, and shape the future of systems engineering in an increasingly complex world.

[See more events »](#)



Upcoming Appearances

[AFCEA TechNet Augusta 2025](#), August 18-21, Augusta, Ga.

Visit the SEI at booth T825.

[AFA Air Space Cyber Conference 2025](#)

Visit the SEI at booth 116.

[See more opportunities to engage with us »](#)



[Upcoming Training](#)

[Documenting Software Architectures](#)

August 4-7 (Live Online)

[Software Architecture Design and Analysis](#)

August 12-15 (Live Online)

E-learning - [CERT Artificial Intelligence \(AI\) for Cybersecurity Professional Certificate](#)

E-learning - [Introduction to Artificial Intelligence \(AI\) Engineering](#)

E-learning - [Effective Communication of Technical Concepts](#)

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