Automating Reverse Engineering and Malware Analysis

February 16, 2022 — In a new podcast, SEI malware researchers Jeff Gennari and Garret Wassermann talk with Suzanne Miller about Kaiju, tools they have developed that help analysts take better advantage of Ghidra, the malware analysis and reverse engineering framework from the National Security Agency.

“We set out years ago to try to find new and better ways to automate as much of malware analysis and reverse engineering as we could,” said Gennari in the podcast “Building on Ghidra: Tools for Automating Reverse Engineering and Malware Analysis.” “Kaiju is a platform for which we build additional tools that will tackle specific problems in malware analysis.”

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

Read more by Gennari and Wassermann about Kaiju, Ghidra, and malware analysis 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.

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Latest Blogs

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.

Six Acquisition Pathways for Large-Scale, Complex Systems
Nickolas Guertin and Doug Schmidt discuss how to map technical reference frameworks (TRFs) to the pathways that compose the DoD's Adaptive Acquisition Framework (AAF).

A Cybersecurity Engineering Strategy for DevSecOps that Integrates with the Software Supply Chain
Carol Woody discusses the challenges of cybersecurity when integrating software from the supply chain.

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Latest Podcasts

Building on Ghidra: Tools for Automating Reverse Engineering and Malware
Analysis
Jeffrey Gennari and Garret Wasserman 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.

Implementing the DoD's Ethical AI Principles
Alex Van Deusen and Carol Smith of the SEI's AI Division discuss their work with the Defense Innovation Unit of the U.S. Department of Defense to develop guidelines for the responsible use of AI.

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Latest Publications

DevSecOps Days Washington, D.C. 2021
These presentations were given at the SEI-hosted, virtual DevSecOps Days conference.

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

SEI Research Review 2021
Videos and presentations from the 2021 SEI Research Review.

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Latest Videos

YouTube - DevSecOps Days Washington, D.C. 2021
YouTube - 2021 SEI Research Review
Presentations and talks from the 2021 SEI Research Review.

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

**Upcoming Events**

**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.

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 »**

**Upcoming Training**

**Designing Modern Service-Based Systems**
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)
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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