Redemption Tool Automates Code Repair from Static Analysis Alerts

June 18, 2024—Static analysis tools analyze a program's source code and alert users to potential errors and vulnerabilities. These tools are critical to software development, but their high number of false positives force engineers to fix only the most critical issues and overlook others. The SEI's new open-source Redemption tool automatically repairs code errors found in static analysis alerts.

“By reducing the number of false positives, we estimate organizations can save around seven and one-half person-years in identifying and repairing security alerts,” writes David Svoboda, a software security engineer in the SEI's CERT Division, in a blog post about the tool.

The Redemption prototype is available in the SEI's GitHub repository. The tool is also the subject of a recent SEI Podcast.

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This report presents an algorithm that constructs the set of reachable system operation modes for a given Architecture Analysis and Design Language (AADL) model and the transitions between them.
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Webcast - Generative AI and Software Engineering Education, June 27
Three experts in software engineering discuss how generative AI is influencing software engineering education.

Secure Software by Design, August 6-7
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DevSecOps Days Washington D.C. 2024, September 18
This free, in-person event in Arlington, Virginia, will teach how to integrate security into DevOps practices and transform DevSecOps journeys.

International Conference on Conceptual Modeling (ER 2024), October 28-31
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