

Carnegie Mellon University Software Engineering Institute



SEI Bulletin — July 25, 2018

Certifiable Distributed Runtime Assurance in Cyber-Physical Systems

Runtime assurance (RA) has become a promising technique for ensuring the safe behavior of autonomous systems (such as drones or self-driving vehicles) whose behavior cannot be fully determined at design time. The Department of Defense (DoD) is increasingly focusing on the use of complex, non-deterministic systems to address rising software complexity and the use of machine learning techniques. In this environment, assuring software correctness has become a major challenge, especially in uncertain and contested environments. In this SEI Blog post, Dionisio de Niz highlights work by a team of SEI researchers to create tools and techniques that will ensure the safety of distributed cyber-physical systems.

[Read the SEI Blog post.](#)

SEI NEWS

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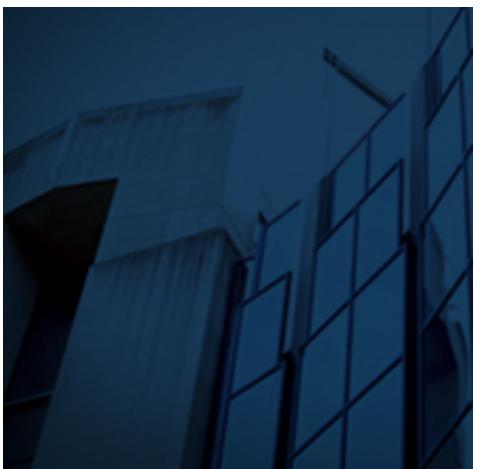
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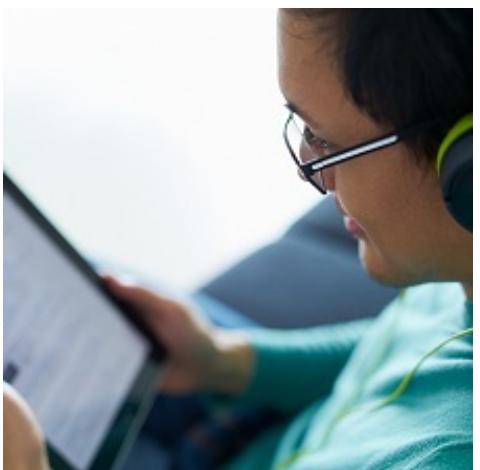
- [Navigating the Insider Threat Tool Landscape: Low-Cost Technical Solutions to Jump-Start an Insider Threat Program](#)
- [ROI Analysis of the System Architecture Virtual Integration Initiative](#)



SEI Blog

Recent posts

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- [10 Types of Application Security Testing Tools: When and How to Use Them](#)



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SEI Events

Featured events

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- [CERT Data Science in Cybersecurity Symposium](#)

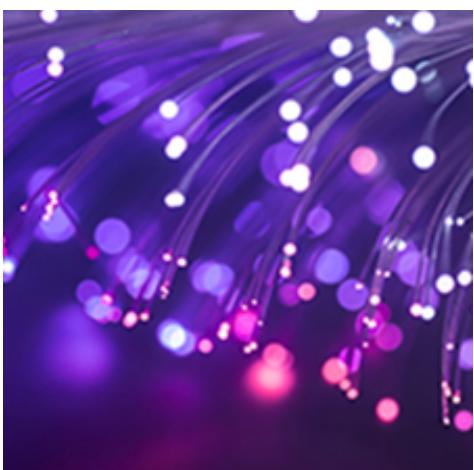
- [SEI Career Fair, Arlington, Va.](#)



SEI Cyber Minute

Short video snapshots of SEI work from our experts

- [Security Engineering Risk Analysis](#)
- [DevOps Metrics & Visualizations](#)



SEI Training

- [Software Architecture: Principles and Practices](#)
August 14-15, 2018 (SEI Pittsburgh, Pa.)
- [ATAM Evaluator Training](#)
September 19-20, 2018 (SEI Pittsburgh, Pa.)



SEI Careers

Featured opportunities

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Our mailing address is

Software Engineering Institute | Carnegie Mellon University | 4500 Fifth Avenue, Pittsburgh, Pa. 15213

info@sei.cmu.edu

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