## Carnegie Mellon University

Software Engineering Institute



**SEI** Bulletin — October 3, 2018

# Threat Modeling for Cyber-Physical Systemof-Systems: Methods Evaluation

The nature of a cyber-physical system (CPS) implies a diversity of potential threats that can compromise the integrity of the system, targeting different aspects ranging from purely cyber-related vulnerabilities to the safety of the system as a whole. The traditional approach used to tackle this matter is to employ one or more threat modeling methods (TMMs) early in the development cycle. Choosing a TMM can be a challenging process by itself. The TMM you choose should be applicable to your system and to the needs of your organization. Therefore, when preparing for the task, it makes sense to answer two questions. First, what kind of TMMs exist and what are they? And second, what criteria should a good TMM satisfy? SEI researchers Nataliya Shevchenko, Brent Frye, and Carol Woody explored answers to the first question in *Threat Modeling: A Summary of Available Methods*. In a new white paper, the researchers address the second question and evaluate TMMs against the chosen criteria.

Read the White Paper.

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- Software Engineering Institute Announces New CFO
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### **SEI Publications**

- <u>Prioritizing Alerts from Multiple Static Analysis</u>
  <u>Tools Using Classification Models</u>
- Navigating the Insider Threat Tool Landscape: Low-Cost Technical Solutions to Jump-Start an Insider Threat Program



### **SEI Blog**

Recent posts

- <u>Decisions for Sustaining a Software Product</u>
  Line
- <u>Challenges Facing Insider Threat Programs and Hub Analysts, Part 2</u>



### **SEI Podcast Series**

Available in video and audio formats

- <u>Using Test Suites for Static Analysis Alert</u>
  Classifiers
- How to Be a Network Traffic Analyst

### **SEI Events**

Featured events

- FloCon 2019
- SATURN 2019



Software and Cyber Solutions Symposium
 2019: Acquisition, Security, and the Supply
 Chain



### **SEI Cyber Minute**

Short video snapshots of SEI work from our experts

- The Promise of Quantum Computing
- Addressing Architectural Security Throughout DevOps



# **SEI Training**

- <u>Insider Threat Vulnerability Assessor Training</u>
  October 24-26, 2018 (SEI Arlington, Va.)
- Insider Threat Analyst
  November 7-9, 2018 (SEI Arlington, Va.)



**SEI Careers** 

Featured opportunities

- Software Developer
- Senior Machine Learning Scientist
- <u>Digital Intelligence Technical Manager</u>
- Associate Talent Engagement Advisor

### **About the SEI Bulletin**

The SEI Bulletin is a biweekly newsletter designed to keep you up to date on SEI news, events, research, and other matters of interest to the SEI

community. We hope you find the SEI Bulletin useful and informative.

### **Send Us Your Story**

Do you have a story about how an SEI technology has positively affected your team or organization? If so, the SEI would like to hear about it. Send a short summary of your success to <a href="mailto:info@sei.cmu.edu">info@sei.cmu.edu</a> and you could be featured in a future issue of the SEI Bulletin.







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