Software Engineering Institute | **Carnegie Mellon University**

SEI BULLETIN

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News: CERT to Offer Training, Certificate for Insider Threat Vulnerability Assessors

The CERT Insider Threat Center has introduced a new Insider Threat Vulnerability Assessor (ITVA) Certificate to train individuals to assist in meeting upcoming federal government standards. "Using the CERT-developed vulnerability assessment tool, trained individuals can help organizations gain a better understanding of their insider threat risk and an enhanced ability to identify and manage associated risks," said Randy Trzeciak, technical manager of the CERT Insider Threat Center. "The assessment methodology assists organizations by measuring how prepared they are to prevent, detect, and respond to the insider threats. Organizations will have the ability to license the CERT Insider Threat Vulnerability Assessment tool for internal use or to assess other organization for potential vulnerabilities."

Randy Trzeciak

[Learn more about this program](#).

Also in the news:

- [SEI Conducts Emerging Technology Domains Risk Survey](#)
- [*2014 SEI Year in Review* Available for Download](#)
- [CERT/CC Team Wins U.S. Government Information Security Leadership Award](#)
- [Rich Program Earns Praise from SATURN 2015 Conference Attendees](#)

SEI Podcast Series: Defect Prioritization With the Risk Priority Number

Most software systems have some "defects" that are identified by users.

Some truly are defects in the sense that the requirements were not properly implemented; some are caused by changes made to other systems; still others are requests for enhancement--improvements that would improve the user's experience. These defects are generally stored in a database and are addressed in a series of incrementally delivered updates. For most systems, it is not financially feasible to fix all of the concerns in the near term, and some issues may *never* be addressed.

The government program office has an obligation to choose wisely among a set of competing defects to be implemented, especially in a financially constrained environment. In this podcast, Will Hayes and Julie Cohen discuss a generalized technique that could be used with any type of system to assist the program office in addressing and resolving the conflicting views and creating a better value system for defining releases.

Will Hayes (top) and
Julie Cohen

Listen to the podcast.

SEI Blog: AADL Code Generation for Avionics Systems

Using the Architecture Analysis and Design Language (AADL) modeling notation early in the development process not only helps development teams detect design errors before implementation, but also supports implementation efforts and produces high-quality code. AADL can identify potential design errors and help avoid propagating them through the development process, where remediation can require massive re-engineering, delays, and increased costs. Verified specifications, however, are still implemented manually, which can lead to additional errors and might break previously verified assumptions and requirements. For these reasons, code production should be automated to preserve system specifications throughout the development process.

Julien Delange

In this SEI Blog post, Julien Delange discusses generating code from AADL and generating configuration files for ARINC653 systems, which are used by the avionics community.

Read the post.

Events: 12th SEI Architecture-Centric Engineering (ACE) Workshop for Educators, August 3-4, 2015, SEI Pittsburgh

The 12th SEI Architecture-Centric Engineering (ACE) Workshop for Educators will be held at the Software Engineering Institute in Pittsburgh, Pennsylvania, USA, on August 3-5, 2015. The SEI hosts this annual event to foster an ongoing exchange of ideas among educators whose curricula include the subjects of software architecture and software product lines. The event is free of charge and open to any accredited, college-level educator.

This year's event will incorporate two SEI courses. The first course, Engineering Run-Time Malware Detection, covers the principles of designing and implementing a real-time malware detection system for an existing operating system, with concrete examples for Windows 7. The second course, DevOps and Continuous Delivery: Software Architecture, Security, and Interactive Learning, is helpful if you wish to adopt DevOps practices and continuous-delivery

workflows. The architecture component of the course focuses on the relationships among application software, the deployment environment, and the supporting tooling.

To learn more about ACE 2015, please visit http://www.sei.cmu.edu/community/edworkshops/2015/index.cfm.

These workshops are open to any accredited college-level educator. If you are an accredited college-level educator and are interested in attending, please send email to info@sei.cmu.edu and include the words "ACE Workshop" in your subject line.

SEI Jobs

The SEI is a great place to pursue your passion. Headquartered in Pittsburgh, Pa., the SEI also has offices in the Washington, DC, and Los Angeles, Calif., metropolitan areas.

Interested in working for the SEI? Visit our Careers page. Below are a few recent employment opportunities. For more job listings and full position descriptions, check out the SEI Careers page.

Computer Security Information Analyst

Software Architect

Project Manager

Senior Analyst

Senior Cybersecurity Engineer

Program Development Manager, Government Program Development
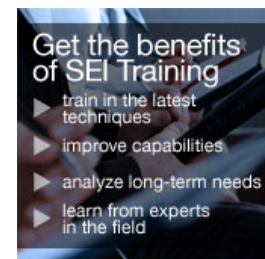
More job listings...

Training

Upcoming Classes:

August 18-20, 2015 (Pittsburgh, PA):
Leading a Development Team

September 15 and 23, 2015 (SEI Virtual Classroom):
SGMM Navigator Training

New SEI eLearning Course:
Big Data Architectures and Technologies

Registration Portal
SEI Training has a robust registration portal that provides simple and secure online access to course

registration payments, a purchase history, confirmation letters, and receipts.

To view a video demo of the SEI Registration Portal, please visit
http://www.sei.cmu.edu/training/registration/

More SEI training opportunities...

Software Engineering Institute, Carnegie Mellon University
1-888-201-4479

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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 info@sei.cmu.edu and you could be featured in a future issue of the SEI Bulletin.