



SEI BULLETIN

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News: Cyber Lightning Exercise Helps Air National Guard and Air Force Reserve Units Learn and Test New Skills

The SEI recently hosted "Cyber Lightning," a three-day joint training exercise involving Air National Guard and Air Force Reserve units from western Pennsylvania and eastern Ohio. The purpose of the exercise, which was designed and moderated by the Workforce Development team in the SEI's CERT Division, was to provide an innovative training opportunity to Air Force Reservists and Guardsmen needing training in cyber defense techniques. Participating in the exercise were members of the 911th Airlift Wing, operating out of the Pittsburgh International Airport Air Reserve Station; the 171st Air Refueling Wing, operating out of the Pittsburgh International Airport; and the 910th Airlift Wing, operating out of the Youngstown-Warren Air Reserve Station in Ohio.



[Learn more about Cyber Lightning.](#)

Also in the news:

- [SEI Security Services Team Earns Defense Security Service Honor](#)
- [13th SEI Software Engineering Workshop for Educators Expands Scope](#)
- [CERT Guide to Insider Threats Named to Cybersecurity Canon](#)
- [Poort Named Winner of 2016 Linda Northrop Software Architecture Award](#)

SEI Podcast Series: Evolving Air Force Intelligence with Agile Techniques

In the past decade, the U.S. Air Force has developed the Distributed Common Ground System (AF DCGS), the Air Force's primary weapon system for intelligence, surveillance, reconnaissance, planning, direction, collection, processing, exploitation, analysis, and dissemination. AF DCGS employs a global communications architecture that connects multiple intelligence platforms and sensors. In this podcast, Harry Levinson discusses the SEI's work with the Air Force to further evolve the AF DCGS using Agile techniques to facilitate more frequent and manageable capability delivery.

[Listen to or view the podcast.](#)



Harry Levinson

SEI Blog: Got Technical Debt? Track Technical Debt to Improve Your Development Practices

Concretely communicating technical debt and its consequences is of interest to both researchers and software engineers. Without validated tools and techniques to do so with repeatable results, developers resort to ad hoc practices, most commonly using issue trackers or backlog-management practices to capture and track technical debt. We examined 1,264 issues from four issue trackers used in open-source industry and government projects and identified 109 examples of technical debt.

Our study revealed that technical debt has entered the vernacular of developers as they discuss development tasks through issue trackers. Even when developers did not explicitly label issues as technical debt, it was possible to identify technical debt items in these issue trackers using a classification method we developed. We use our results to motivate an improved definition of technical debt and an approach to explicitly report it in issue trackers. In this blog post, the SEI's Stephanie Bellomo describes our classification method and some implications of tracking debt for both practice and research.



Stephanie Bellomo

[Read the post.](#)

Events: How to Build an Effective Insider Threat Program to Comply With the New NISPOM Mandate

On May 18, 2016, the U.S. Department of Defense (DoD) published Change 2 to DoD 5220.22-M, "National Industrial Security Operating Manual (NISPOM)." NISPOM Change 2 requires contractors to establish and maintain an insider threat program to detect, deter, and mitigate insider threats.

The SEI will host a free webinar addressing these NISPOM changes on Tuesday, July 7, 2016 from 10:30 a.m. to 11:30 a.m. Eastern Standard Time. Randy Trzeciak, Technical Manager of the SEI CERT Division's Insider Threat Center, will summarize new requirements mandated by NISPOM Change 2 and the impact it will have on DoD contracting organizations.



Randy Trzeciak

[Learn more and register.](#)

Events: 13th SEI Software Engineering Workshop for Educators

Building on the twelve-year success of the Architecture-Centric Engineering Workshops for Educators (ACE), the SEI will this year expand the workshop's scope to embrace the entire field of software engineering. To reflect this growth, the event is now called the SEI Software Engineering Workshop for Educators. The SEI will host the workshop from August 2 through 4, 2016, at its Pittsburgh, Pennsylvania, headquarters. The workshop fosters an exchange of ideas among educators whose curricula include subjects spanning software engineering. The three-day workshop will feature two days of SEI courses.



This year's courses cover big data and service-oriented architecture design. Day 3 is devoted to invited talks and group sessions, facilitated by SEI team members, where

participants share experiences, ideas, and tangible artifacts for introducing software engineering topics into the college curriculum.

The workshop is open to any accredited, college-level educator. In lieu of an entry fee, attendees are expected to bring a shareable artifact to the workshop.

[Learn more about the 13th SEI Software Engineering Workshop for Educators and register.](#)

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?

Below are a few recent employment opportunities. For more job listings and full position descriptions, check out the [SEI Careers page](#).

[Machine Learning Research Scientist](#)

[DevOps Engineer](#)

[Cybersecurity Engineer - Exercise Developer](#)

[International Cybersecurity Analyst](#)

[More job listings...](#)

Training Opportunities

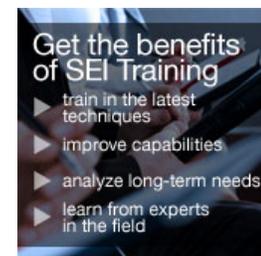
Upcoming Classes:

August 16 - 18, 2016 (Pittsburgh, Pa.)

[Leading a Development Team](#)

August 22 - 23, 2016 (Pittsburgh, Pa.)

[Software Architecture: Principles and Practices](#)



2016 Course Schedule

[All 2016 Courses](#)

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.

