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News: SEI Contract Renewed by Department of Defense for \$1.73 Billion

The U.S. Department of Defense has renewed its contract with Carnegie Mellon University for the Software Engineering Institute. The contract ensures that the Institute, a federally funded research and development center, will continue to support the nation's defense by advancing and transitioning the science, technologies, and practices needed to engineer and secure software systems.



The SEI, which is sponsored by the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, is the only FFRDC focusing specifically on software-related security and engineering issues. The contract was awarded for a term of five years with an option for an additional five years. The contract has an overall ceiling of \$1.73 billion.

"It is an honor for CMU to be selected to manage the government's research and development center for software engineering and cybersecurity at such a critical time for this work," university President Subra Suresh said. "CMU's expertise in securing systems and combatting cyberattacks is a university-wide strength across SEI and various academic units, and this work is becoming increasingly important not only for national defense but also for individual citizens, critical infrastructure, and commercial enterprises."

[Read More.](#)

Also in the news:

- [SEI Hosts Crisis Simulation Exercise for Cyber Intelligence Research Consortium](#)
- [SEI Improves Access to Open-Source Tools and Establishes Home on GitHub](#)
- [2014 SEI Year in Review Available for Download](#)
- [Rich Program Earns Praise from SATURN 2015 Conference Attendees](#)

SEI Podcast Series: Agile Methods in Air Force Sustainment

For several years, the Software Engineering Institute has researched the viability of Agile software development methods within Department of Defense programs and barriers to the adoption of those methods. In this podcast, SEI researcher Eileen Wrubel discusses how software sustainers leverage Agile methods and overcome barriers to using Agile methods.

[Listen to the podcast.](#)



Eileen Wrubel

SEI Blog: A Field Study of Technical Debt

Managing technical debt is an increasingly critical aspect of producing cost-effective, timely, and high-quality software products, especially in projects that apply agile methods. A delicate balance is needed between the desire to release new software features rapidly to satisfy users and the desire to practice sound software engineering that reduces rework. Too often, however, technical debt focuses on coding issues when a broader perspective--one that incorporates software architectural concerns--is needed. This blog post, the first in a series, highlights the findings of a recent field study to assess the state of the practice and current thinking regarding technical debt and guide the development of a technical debt timeline.

[Read the post.](#)



Neil Ernst

Events: Software Solutions Conference, November 16 - 18, 2015

On November 16-18, 2015, the Carnegie Mellon Software Engineering Institute (SEI) will host its first Software Solutions Conference (SSC) in Crystal City, Va. The conference is designed to increase attendees' awareness of emerging technologies and technical strategies for assuring quality, timeliness, trust, and affordability in current and future software-reliant systems.

In addition to talks by leading experts in the field of software engineering, the conference will provide a forum for networking and participation outside of formal sessions and for influencing the SEI research agenda. The SEI is a federally funded research and development center at Carnegie Mellon University dedicated to helping government and industry organizations acquire, develop, operate, and sustain software systems that are affordable, enduring, and trustworthy.

[Learn more and register.](#)



SEI Webinar Series: DevOps Security

The implementation of DevOps implies improvement across the entire scope of software delivery. However, as with any process change or introduction of new technology, lack of attention to security can invite disaster. In this presentation, the SEI's Timothy Palko and Christopher Taschner will explore some of the security-related topics and expectations to consider when planning and changing your process to accommodate DevOps practices. Specific topics will include automation, monitoring, team collaboration, customer interaction, and also specific technologies such as Docker and Gauntlt.



Participation is free, but registration is required.

[Learn more and register.](#)

Events: Nominations Sought for 2016 IEEE/SEI Watts S. Humphrey Award

Nominations are now open for the 2016 IEEE Computer Society/SEI Watts S. Humphrey Software Process Award (SPA). Since 1994, the SEI and the Institute of Electrical and Electronics Engineers (IEEE) Computer Society have cosponsored the award, which recognizes outstanding achievements in improving an organization's ability to create and evolve high-quality software-dependent systems.



Watts Humphrey

Nominations must be submitted by October 15, 2015.

Achievements recognized by the Watts S. Humphrey Award can be the result of any type of process-improvement activity. They need not have been based on a specific framework, model, or body of software engineering principles, practices, techniques, or methods.

[Read more and learn how to submit your nomination.](#)

Events: 12th SEI Architecture-Centric Engineering (ACE) Workshop for Educators, August 3-5, 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? Below are a few recent employment opportunities. For more job listings and full position descriptions, check out the [SEI Careers page](#).

[Cyber Security Engineer - Exercise Developer](#)

[Cybersecurity Researcher](#)

[Research Scientist](#)

[Software Developer](#)

[More job listings...](#)

Training

Upcoming Classes:

September 16-18, 2015 (Arlington, VA):

[Managing Computer Security Incident Response Teams](#)

September 24-25, 2015 (Pittsburgh, PA)

[Software Architecture Design and Analysis](#)



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

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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.