



September 9, 2015 |



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News: SEI Makes KD-Cloudlet Software Freely Available

For several years, SEI researchers on the Pervasive Mobile Computing team have investigated the use of cloud computing at the tactical edge--the environment at the edge of a network infrastructure that is resource constrained, intermittent, and employed by users under high levels of stress. This research drove the development of tactical cloudlets. Hosted on vehicles or other platforms in proximity of mobile users, tactical cloudlets can



- provide infrastructure to offload expensive computation
- provide forward data staging for a mission
- perform data filtering to remove unnecessary data from streams intended for dismounted users
- serve as collection points for data heading for enterprise repositories

As part of the SEI's mission to transition the technologies it develops to the larger software engineering community, the SEI has made its implementation of tactical cloudlets, [KD-Cloudlet](#), freely available in its open-source code repository on GitHub. Using KD-Cloudlet, developers can turn any computational node running Linux--from a laptop to a more powerful server--into a discoverable node that can be used by nearby mobile devices for computation offload and data staging.

[Learn more and download.](#)

Also in the news:

- [SEI Hosts 12th Annual ACE Workshop for Educators](#)
- [CERT Division Hosts High School Cybersecurity Competition](#)
- [SEI Contract Renewed by Department of Defense for \\$1.73 Billion](#)

- [SEI Hosts Crisis Simulation Exercise for Cyber Intelligence Research Consortium](#)

CERT Podcast Series: Capturing the Expertise of Cybersecurity Incident Handlers

In this podcast, Dr. Richard Young, a professor with Carnegie Mellon's Tepper School of Business, teams with Sam Perl, a member of CERT's Enterprise Threat and Vulnerability Management team, to discuss their research on how expert cybersecurity incident handlers think, learn, and act when faced with an incident.

The research study focuses on critical cognitive factors that such experts use to make decisions when faced with a complex incident, including how to deal with critical information that is missing. Study results may be used to enhance the knowledge and skills of less experienced responders.

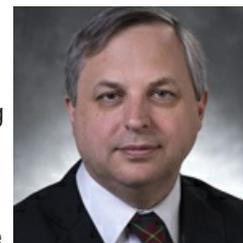
[Listen to the podcast.](#)



Dr. Richard Young (top)
and Sam Perl

SEI Blog: The SEI Technical Strategic Plan

Department of Defense (DoD) systems are becoming increasingly software reliant, at a time when concerns about cybersecurity are at an all-time high. Consequently, the DoD, and the government more broadly, is expending significantly more time, effort, and money in creating, securing, and maintaining software-reliant systems and networks. The [first post](#) in this series by Kevin Fall, Deputy Director, Research, and CTO, provided an overview of the SEI's five-year technical strategic plan, which aims to equip the government with the best combination of thinking, technology, and methods to address its software and cybersecurity challenges.



Kevin Fall

In [this blog post](#), the second in the series, Fall presents ongoing and new research that is being undertaken at the SEI to address key cybersecurity, software engineering, and related acquisition issues faced by the government and DoD.

[Read the post.](#)

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.



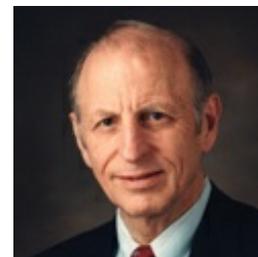
In addition to talks by leading experts in the field of software engineering, the conference will provide a forum for networking and participation outside of formal sessions and for influencing the SEI research agenda. The SEI is a federally funded

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.](#)

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.](#)

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 \(Fort George G. Meade\)](#)

[Cyber Security Engineer - Exercise Developer \(Pittsburgh, PA or Arlington, VA\)](#)

[Cyber Security Engineer - Exercise Developer \(Pittsburgh, PA or Arlington, VA\)](#)

[More job listings...](#)

Training

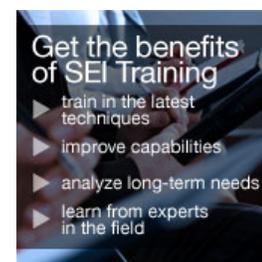
Upcoming Classes:

October 5-9, 2015 (Arlington, Va.)

[Fundamentals of Incident Handling](#)

October 22-23, 2015 (Pittsburgh, Pa.)

[Advanced Software Architecture Workshop](#)



SEI eLearning:

[Big Data Architectures and Technologies](#)

New Course Offering in December:

December 1-2 (Arlington, Va.)

[Measuring What Matters: Security Metrics Workshop](#)

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...](#)

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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.