Software Engineering Institute | **Carnegie Mellon University**

SEI BULLETIN

November 4, 2015 | [YouTube] [LinkedIn] [Facebook] [Twitter] | [Careers @ SEI](#)

In This Issue

- [Call for Participation in Group Expert Judgment Study](#)
- [SEI Podcast Series: Improving Quality Using Architecture Fault Analysis with Confidence Arguments](#)
- [SEI Blog: Toward Efficient and Effective Software Sustainment](#)
- [Events: Software Solutions Conference, November 16-18, 2015](#)
- [Events: FloCon 2016](#)
- [Events: SEI Architecture Technology User Network (SATURN) Announces Call for Submissions](#)
- [SEI Jobs](#)
- [Training Opportunities](#)

News: Call for Participation in Group Expert Judgment Study

Researchers at the Carnegie Mellon University Software Engineering Institute (SEI) are seeking volunteers to participate in a study. The Quantifying Uncertainty for Early Lifecycle Cost Estimation (QUELCE) research project is conducting a public call for participation from individuals who have recent experience executing a DoD program. This study explores how to calibrate individual and group expert judgment in the context of decisions about uncertain events within Department of Defense (DoD) programs. The study also explores the impact of those uncertain events on the cost of executing a program.

The call for participation is open now through November 30, 2015. Participants will gain knowledge of measuring expert judgment and techniques to improve their own judgments and estimations. After the experiment, participants will receive their personal test results in addition to summarized group results in a format that maintains individual confidentiality.

[Learn more about this study and how to participate](#).

Also in the news:

- [Software Solutions Conference Keynote Speakers Announced](#)
- [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](#)

SEI Podcast Series: Improving Quality Using Architecture Fault Analysis with Confidence Arguments

In this podcast, Peter Feiler discusses a case study that demonstrates how an analytical architecture fault-modeling approach can be combined with confidence arguments to diagnose a time-sensitive design error in a control system and to provide evidence that proposed changes to the system address the problem. The analytical approach, based on the SAE Architecture Analysis and Design Language for its well-defined timing and fault-behavior semantics, demonstrates that such hard-to-test errors can be discovered and corrected early in the lifecycle, thereby reducing rework cost.

Peter Feiler

[Listen to the podcast](#).

SEI Blog: Toward Efficient and Effective Software Sustainment

Mike Phillips works on the problem of sustaining legacy weapons systems that are no longer in production, but are expected to remain a key component of our defense capability for decades to come. Despite the fact that these legacy systems are no longer in the acquisition phase, software upgrade cycles are needed to refresh their capabilities every 18 to 24 months. In addition, significant modernization can often be made by more extensive, focused software upgrades with relatively modest hardware changes.

Mike Phillips

In this blog post, Phillips describes effective sustainment engineering efforts in the Army, using examples from across its software engineering centers. These examples are tied to SEI research on capability maturity models, agility, and the Architecture Analysis and Design Language (AADL) modeling notation.

[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.

Software Solutions Conference 2015
Software: Catalyst of Change
November 16–18, 2015
Crystal City, VA

The keynote speakers are

- **David Duma**, Principal Deputy Director, Operational Test and Evaluation, U.S. Department of Defense
- **Arun Seraphin**, Professional Staff Member, Senate Armed Services Committee
- **Philip Koopman**, Associate Professor of Electrical and Computer Engineering, Carnegie Mellon University

- **Tim Rudolph**, Chief Technology Officer, Air Force Life Cycle Management Center
- **Kevin Fall**, Chief Technology Officer, Carnegie Mellon University Software Engineering Institute

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.

Learn more and register.

Events: FloCon 2016

The FloCon network security conference provides a forum for large-scale network flow analytics. Showcasing next-generation analytic techniques, FloCon is geared toward operational analysts, tool developers, researchers, and others interested in applying the latest analytics against large volumes of traffic.

FloCon 2016 will be held January 11 to 14 in Daytona Beach, Florida.

Learn more about FloCon 2016 and how you can participate.

Events: SEI Architecture Technology User Network (SATURN) Conference Announces Call for Submissions

The 12th SEI Architecture Technology User Network (SATURN) Conference 2016 Call for Submissions is now open. SATURN 2016 will be held at the Sheraton San Diego Hotel & Marina in San Diego, California, May 2-5, 2016.

Learn more about SATURN 2016 and how you can participate.

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.

Computer Security Information Analyst

Research Scientist

Cybersecurity Engineer - Exercise Developer

[Cybersecurity Engineer - Exercise Developer](#)

[More job listings...](#)

Training

Upcoming Classes:

December 7-11, 2015 (Pittsburgh, Pa.)
[Modeling System Architectures Using the Architecture Analysis and Design Language (AADL)](#)

December 15-17, 2015 (Arlington, Va.)
[Advanced Forensic Response and Analysis](#)

SEI eLearning:
[Big Data: Architectures and Technologies](#)

2016 Course Schedule
[January-June course offerings](#)

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.