

**Layered
Assurance
Workshop**

PROGRAM

10th Layered Assurance Workshop

December 5-6, 2016

Los Angeles, California

**Affiliated workshop of the
Annual Computer Security Applications Conference (ACSAC)**

Monday, December 5th 2016

7:30-8:30	BREAKFAST
8:30-8:35	Welcome and Opening Remarks –Rance J. DeLong, Gabriela F. Ciocarlie, Peter G. Neumann
8:35-10:00	Keynote Talk: <i>Layered Architectural Design, Implementation, and Assurance</i> Harald Rueß, fortiss, Munich, DE
10:00-10:30	BREAK
10:30-12:00	Invited Talk: <i>CertiKOS: A Layered Architecture for Building Certified System Software</i> Zhong Shao, Yale University, US
12:00-13:30	LUNCH
13:30-15:00	Invited Talk: <i>Beyond "I have a bad feeling about this": Jedi CWEs for Parser Weaknesses</i> Sergey Bratus, Dartmouth College, US
15:00-15:30	BREAK
15:30-16:45	Invited Talk: <i>Securing Cyber-Physical Systems Using Safety Envelopes</i> Ashish Tiwari, SRI International, US
16:45-17:20	Contribution: <i>War Stories, Barriers to Adoption, and Developing Technologies</i> Todd Carpenter, Adventium Labs, US
17:20-17:45	WIP: <i>Trustworthy SLA Framework: An Approach for Protecting Government Data Secrecy</i> Yudhistira Nugraha, Andrew Martin, University of Oxford, UK

Tuesday, December 6th 2016

7:30-8:30	BREAKFAST
8:30-8:35	Day 2 Opening Remarks
8:35-10:00	Keynote Talk: <i>Ironclad: Full Verification of Complex Systems</i> Bryan Parno, Microsoft Research, US
10:00-10:30	BREAK
10:30-12:00	Invited Talk: <i>On the Role of the Network for Layered Assurance in Distributed Systems</i> Wilfried Steiner, TTTech, Vienna, AT
12:00-13:30	LUNCH
13:30-15:00	Panel: <i>Ensuring Trustworthy Automated Systems</i> Moderator: Peter Neumann, SRI International, US In light of the anticipated risks of fully automated and semi-automated systems (for example, involving aircraft, drones, automotive vehicles, robots, and the Internet of Things), this panel will examine what might provide serious assurance of total-systems trustworthiness with respect to human safety, security, resilience to adversity, and other critical requirements. This panel is preceded in the program by several talks that will lay some groundwork for the discussion, including system architectures, formal analyses, and case-study examples. In a sense, this problem is much broader than it might seem, and thus is relevant to all compositional systems in general.
15:00-15:30	BREAK
15:30-16:25	Contribution: <i>Composition Challenges for Automated Software Diversity</i> Ben Davis, et al, Galois Inc., US
16:25-16:50	WIP: <i>Assurance Challenges in Isolated Execution Environments</i> Read Sprabery, University of Illinois at Urbana-Champaign, US
16:50-17:45	Contribution: <i>Software Supply Chain Management: Enabling Enterprise Resilience & Cyber Security Assurance</i> Joe Jarzombek, Synopsys, US
17:45	Workshop Closing
18:00-20:00	ACSAC/LAW Reception