

# Monday 5 December and Tuesday 6 December, 2011

## Orlando, Florida, USA

### The Fifth Annual Layered Assurance Workshop (LAW 2011) Program

Contributed papers will be linked to the online program prior to the commencement of LAW. Presentations will be linked to the program shortly after the conclusion of LAW. See <http://fm.csl.sri.com/LAW/2011>

The LAW Business Meeting scheduled after the conclusion of sessions on Monday December 5 is open to all interested individuals. Planning for LAW 2012 will commence. Participation from the LAW community is essential to the ongoing vitality of LAW.

LAW attendees are invited to attend the ACSAC Reception on Tuesday December 6 at 6 PM.

The names of invited speakers and presenting authors are underlined in the Program following.

#### Monday December 5

07:30-08:30	BREAKFAST
08:30-08:45	Welcome and Opening Remarks Rance DeLong, LynuxWorks, LAW General Chair Gabriela Ciocarlie, Coverity, LAW Program Chair
08:45-10:00	Keynote: <i>Supposing we got a "Do over"?</i> <u>Howard Shrobe</u> DARPA Information Innovation Office (I2O) CRASH Program Manager, MRC Program Manager
10:00-10:30	BREAK
10:30-12:00	Panel: <i>The Future of Highly Trustworthy Systems, Networks, Apps, and Clouds</i> Moderator: <u>Peter G. Neumann</u> , CRASH CTSRD hw/sw arch, SRI International Panelists: <u>Gregory Sullivan</u> , CRASH SAFE hw/sw arch, BAE Systems <u>Rance DeLong</u> , Future Mils™, LynuxWorks <u>W. Mark Vanfleet</u> , National Security Agency / NCSC <u>Howard Shrobe</u> , CRASH / MRC, DARPA I2O
12:00-13:30	LUNCH
13:30-15:00	Contributed Papers: <i>Introduction to the Guardol Programming Language and Verification System</i> <u>Konrad Slind</u> <i>Data Flow Logic: Analyzing Information Flow Properties of C Programs</i> <u>David Greve</u> <i>Layered Assurance Scheme for Multicore Architectures</i> <u>Jim Alves-Foss</u>
15:00-15:30	BREAK
15:30-16:45	Invited Talk: <i>A Layered Assurance Perspective: Lessons from the Formal Analysis of Fault-Tolerant Systems</i> <u>Paul Miner</u> Senior Research Engineer, NASA Langley Research Center
16:45-17:45	Contributed Papers: <i>Evaluating Multicore Architectures for Application in H-A Systems</i> <u>Ryan Bradetich</u> <i>Composing a High-Assurance Infrastructure out of TCB Components</i> <u>Mark R. Heckman</u>
18:00-18:45	LAW Business Meeting and LAW 2012 Planning

Tuesday December 6

07:30-08:30	BREAKFAST
08:30-08:45	Day 2 Opening Remarks
08:45-10:00	Keynote: <i>Using eliminative induction and defeasible reasoning to assess assurance case confidence</i> <u>John B. Goodenough</u> SEI Fellow Former Chief Technical Officer Software Engineering Institute, Carnegie Mellon University
10:00-10:30	BREAK
10:30-11:45	Invited Talk: <i>Rigorous Component-based System Design Using the BIP Framework</i> <u>Saddek Bensalem</u> Professor, University Joseph Fourier Technical Project Leader, Distributed and Complex Systems Group, VERIMAG Laboratory European Network of Excellence on Embedded System Design
11:45-12:00	Discussion - ALL
12:00-13:30	LUNCH
13:30-15:00	Work-In-Progress Presentations <i>Multi-layer Defense for Power Grid SCADA Sys.</i> -- <u>Joseph Giampapa</u> <i>High Robustness</i> -- <u>John W. Mildner</u> <i>MILS Research</i> -- <u>Rance DeLong</u> <i>Metric for Layered Defenses</i> -- <u>Nathaniel Boggs</u> <i>Compositional Assurance for Robotic Coordination</i> -- <u>Joseph Giampapa</u>
15:00-15:30	BREAK
15:30-16:45	Invited Talk: <i>Bluespec Codesign Language: A Unified Language to Enable Hardware / Software Codesign</i> <u>Nirav Dave</u> Computer Scientist, SRI International
16:45-17:30	Discussion - ALL
17:30-17:45	Closing Remarks
18:00-20:00	RECEPTION

### LAW Organizing Committee

Joyce Brookins	Air Force Cryptographic Modernization Program Office (CMPO)
Gabriela Ciocarlie	Coverity
Rance J. DeLong	LynuxWorks
George W. Dinolt	Naval Postgraduate School
Peter G. Neumann	SRI International
Michael Putney	MITRE
Gordon Uchenick	Coverity

### Contact: Workshop Chairman

[Rance J. DeLong](#) -- LynuxWorks