

Call for Papers

SAVCBS'06

Workshop at
ACM SIGSOFT 2006/FSE-14

November 10-11, 2006

The fifth workshop on specification and verification of component-based systems is affiliated with <u>ACM SIGSOFT 2006/FSE-14</u> and Portland, Oregon, November 10-11, 2006. Seven page papers are due on *August 15*, 2006.

Theme and Topics of Interest

SAVCBS is focused on using formal (i.e., mathematical) techniques to establish a foundation for the specification and verification of component-based systems. Suggested research topics of interest include (but are not limited to):

- Techniques for component-based verification or reasoning
- Component-based specification languages
- Static analysis of components and component compositions
- Verification-oriented design methodologies for components
- Dynamic checking techniques, including run-time assertion or property checking
- Specification and verification of non-functional component behavior (performance, memory, concurrency, etc.)
- Unifying formal descriptions of concurrency properties with model-based behavioral descriptions of components
- Balancing tradeoffs (automatic/manual verification, soundness/completeness, static/dynamic verification, testing/formal verification, scalability/coverage, etc.)
- Theories of component composition
- Industrial experience, such as adoption issues, with formal techniques for component-based systems
- Case studies of applying formal techniques to component based systems
- Educational experience or tactics for formal approaches to component-based systems Submissions should outline the current state of research or practice, describe the most pressing shortcomings, and formulate goals for future development.

Challenge Problem

One session during the workshop will be devoted to presenting solutions (full or partial) to a challenge problem. This problem will present features that pose difficulties for current specification technologies. The session will be open both to presenters as well as participants of the workshop. Details on the challenge problem are posted at http://www.cs.iastate.edu/SAVCBS/2006/challenge.shtml. Solutions should illustrate innovative features of specification or verification as they pertain to this particular problem.

Submissions

Submissions must not exceed 7 pages. We encourage, but do not require, use of the ACM Conference format. We also suggest that you add page numbers to your submission, to make adding comments easier. Papers will be accepted in PDF or Postscript formats. Papers will be submitted on-line at http://www.easychair.org/SAVCBS06/. Best papers will be selected to submit to special issue of *IEE Proceedings Software*.

Important dates

Submission deadline: August 15, 2006 Notification date: September 15, 2006 Final versions: October 15, 2006

Workshop Paper Selection Committee:

- Jonathan Aldrich, chair (Carnegie Mellon)
- Michael Barnett (Microsoft Research)
- Patrice Chalin (Concordia University)
- Robert Chatley (Kizoom, London)
- David Coppit (The College of William and Mary)
- <u>Ivica Crnkovic</u> (Mälardalen University)
- Stephen Edwards (Virginia Tech)
- Timothy J. Halloran (Air Force Institute of Technology)
- Marieke Huisman (INRIA Sophia Antipolis)
- <u>Joeseph Kiniry</u> (University College Dublin)
- Matthew Parkinson (Middlesex University)
- Corina Pasareanu (QSS/NASA Ames Research Center)
- Andreas Rausch (University of Kaiserslautern)
- Robby (Kansas State)
- Heinz Schmidt (Monash University)
- Wolfram Schulte (Microsoft Research)
- Natasha Sharygina (Lugano and Carnegie Mellon)
- Tao Xie (North Carolina State)

See http://www.cs.iastate.edu/SAVCBS/ for more details.