Seventh Australasian Workshop on Software and System Architectures

In conjunction with
Australian Software Engineering Conference (ASWEC 2006)
Sydney, Australia
April 18, 2006

Motivation
A current trend in software architecture is to make use of the benefits of software components (i.e., software units with well defined requires and provides interfaces which contractually specify component deployment and inter-component dependencies and interactions). One of the expected benefits from a linkage of software architecture and components is the use of contractual interfaces specifications which allow the inference of global system properties (e.g., quality attributes) from local component properties and architectural interaction patterns. However, practice has shown that this linkage is not as straightforward as it seems and, therefore, further investigations are needed to overcome the respective problems.

The aim of the 2006 Australasian Workshop on Software and System Architectures (AWSA 2006) is to bring together practitioners and researchers to discuss ideas, exchange experiences and explore future directions in the area of software architectures and component-based software engineering. In particular, the workshop encourages submissions reporting industrial experiences (positive and negative) when using software components for architecting, configuring, or reengineering software and system architectures.

Topics
Authors are encouraged to address any aspects of software architecture and components in their contributions. Suggested topics of interest include, but are not limited to:

- Patterns of component interaction in system and software architectures
- Languages and tools for architectural design supporting
  - the specification of component integration,
  - the description and analysis of component interactions, such as patterns, protocols, and channels,
  - the specification and analysis of non-functional properties (i.e. quality attributes) of architectures and components (e.g., quality of service, security, timing, and reliability),
  - the definition of interfaces to components, and
  - the prediction of architectural properties.
- Traceability between architectural descriptions and concrete implementations on industrial middleware platforms (such as .NET/COM+, EJB, or CORBA)
- Middleware extensions with enriched component interfaces
- Methods for the construction of systems with assured properties (e.g., security, timing, and reliability)
- Architectural notations suitable for specifying architectures and/or architectural styles
- Service Oriented Architectures
- Principles and processes of architecture design
- Model-driven Architectures and Development
- Experiences in quantitative modelling to predict system performance and constraints
- Industry case studies and empirical evaluations
Submissions and Participation

In order to get a suitable number of participants, participation at the workshop is by invitation only, mainly based on acceptance of a position statement/paper submitted prior to the event. Submissions can be extended abstracts (up to 4 pages) or full papers (up to 12 pages). All submissions will be fully peer-reviewed by at least two members of the Program Committee and/or other experts working in the field. Based on the quality and originality, the best submissions will be presented at the workshop. It is expected that at least one author of each accepted paper will register for the workshop. To make the discussion effective, workshop attendance will be limited to 15 to 30 people.

To maximize interactions between participants and enable discussions, but also giving participants the opportunity to present their areas of interest, this event will contain both sessions with paper presentations as well as discussion sessions. We will also make sure that there will be enough opportunities for participants to discuss topics of interest in further detail outside scheduled workshop sessions.

Submissions should not exceed 4 pages (for extended abstracts) or 12 pages (for full papers) and must have a cover page including the paper title, abstract, names and affiliations of authors, postal contact addresses, email addresses, and telephone numbers. In addition, we ask the authors to include a list of critical questions and/or some, perhaps provocative, statements at the end of their submission which will assist the organizers to define topics for discussion in advance. Submissions should be sent in an electronic format (PDF or PostScript) to jschneider@swin.edu.au and preferably prepared in IEEE Proceedings format (formatting instructions available from computer.org).

All accepted position statements will be made available to the participants at the workshop's web-site prior to the event. The proceedings containing all accepted submissions will be published by Swinburne University Press. Furthermore, we are currently investigating avenues for further publication of selected papers.

For further information about the workshop, please refer to the workshop home page at http://www.ict.swin.edu.au/conferences/awsa2006/ or contact Jean-Guy Schneider.

Expression of Interest

We would very much appreciate if you could contact Jean-Guy Schneider (jschneider@swin.edu.au) or any of the other organizers prior to January 23, 2006 and express your interest in either submitting a position statement or attending the workshop. Expression of interest is not required for submission, but this information will assist us in our planning and in organizing a better event. Thank you in advance for your cooperation.

Important Dates

- Expression of Interest: January 23, 2006
- Paper submission: February 14, 2006 (extended)
- Notification of acceptance: February 28, 2006
- Camera ready copy: March 20, 2006
- Workshop: April 18, 2006

Workshop Organizers

- Jean-Guy Schneider  
  Faculty of Information and Communication Technologies, Swinburne University of Technology, Melbourne, Australia
- Ian Gorton  
  National ICT Australia, Sydney, Australia
- John Grundy  
  Departments of Electrical Engineering & Computer Science, University of Auckland, New Zealand
- Jun Han  
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Previous Events
For information about previous Australasian Workshop on Software and System Architectures, please refer to the following web-sites:

- AWSA 2005: http://mercury.it.swin.edu.au/ctg/AWSA05/
- AWSA 2000: http://mercury.it.swin.edu.au/ctg/awsa00/