CALL FOR PAPERS

DSN 2009 Workshop on
Architecting Dependable Systems
(DSN 2009 WADS)

Theme:
Architectures for Mobile and Ubiquitous Systems

Estoril, Lisboa - Portugal
29 June 2009

http://www.cs.kent.ac.uk/wads

WORKSHOP ORGANIZERS

Antonio Casimiro
University of Lisbon, Portugal
casim[at]di.fc.ul.pt

Rogério de Lemos
University of Coimbra, Portugal
University of Kent, UK
r.delemos[at]kent.ac.uk

Cristina Gacek
Newcastle University, UK
cristina.gacek[at]ncl.ac.uk

PROGRAM COMMITTEE

Saurabh Bagchi (USA)
Jean-Charles Fabre (France)
Holger Giese (Germany)
Karl M. Goeschka (Austria)
Lars Grunske (Australia)
Marc-Olivier Killijian (France)
Philip Koopman (USA)
Miroslav Malek (Germany)
Nenad Medvidovic (USA)
René Meier (Ireland)
Regina Moraes (Brazil)
Tatsuo Nakajima (Japan)
Elisabeth A. Nguyen (USA)
David Rosenblum (UK)
Hakim Weatherspoon (USA)
Michel Wermelinger (UK)

This workshop will continue the initiative of bringing together the international communities of dependability and software architectures. The first workshop on Architecting Dependable Systems was organised during the International Conference on Software Engineering 2002 (ICSE 2002). Since then seven workshops were organised and five books were published. This series of workshops have shown to be a fertile ground for both communities to clarify previous approaches, thus helping to promote new topical areas where the most promising research may lie, while avoiding the reinvention of the wheel.

The main focus of this series of workshops is to address at the architectural level the structuring, modelling, and analysis of dependable software systems. During DSN 2009 WADS the underlying theme will be **Architectures for Mobile and Ubiquitous Systems**.

The ever increasing variety and capability of computing devices, the continuous improvement of wireless networks along with the emergence of new software paradigms and business models have created new needs for applications and services. This allied to a strong demand for dependable and secure systems, raises significant new challenges to system architects.

OBJECTIVES AND TOPICS

The aim of the workshop is to bring together the communities of software architectures and dependability to discuss the state of research and practice when dealing with dependability issues at the architecture level. We are interested in submissions from both industry and academia on all topics related to software architectures for dependable systems. These include, but are not limited to:

- **Rigorous design**: architectural description languages; architectural patterns; formal development; architectural views; architectural support for evolution; integrators (wrappers) for dependability; representation of fault assumptions;

- **Verification & validation**: architectural inspection techniques; theorem proving; type checking; model checking; architecture-based fault injection; architecture-based conformance testing; simulation;

- **Fault tolerance**: redundancy and diversity at the architectural level; error confinement; architectural monitoring; dynamically adaptable architectures; exception handling in software architectures; tolerating architectural mismatches; architectural support for self-healing, self-repairing, self-stabilizing systems; support for adaptable fault tolerance;

- **System evaluation**: assurance based development; dependability modeling and analysis in software architectures; run-time checks of dependability models at the architectural level; tradeoff between dependability and cost;

- **Enabling technologie**s: model driven architectures; component based development; aspects oriented development; middleware;

- **Application areas**: mobile and ubiquitous systems; safety-critical systems; critical infrastructures; embedded systems; service oriented architectures: e-commerce, e-business, e-government;

PARTICIPATION AND SELECTION PROCESS

The workshop is open to all researchers, system developers and users who are involved with or have an interest in dependability at the architecture level. We encourage all the prospective participants to submit an extended abstract, work-in-progress report or position paper.

The submissions must conform to the proceedings publication format (IEEE Conference style) and should be between 2 and 6 pages, including all text, references, appendices, and figures. They should explain the contribution to the field and the novelty of the work, making clear the current status of the work. Workshop paper submissions should be sent electronically (in PDF format), by the submission date, through the Web submission system accessible from the Workshop home page. The submissions will be reviewed by at least three members of the Program Committee. The papers will be published in a supplemental volume of the DSN Proceedings.

IMPORTANT DATES

Submission deadline: 23 March 2009 (hard deadline)
Author notification: 20 April 2009
Publication ready copy: 11 May 2009

FURTHER INFORMATION

Workshop-related email should be addressed to: dsn2009-wads[at]kent.ac.uk
Workshop home page: http://www.cs.kent.ac/wads