CALL FOR PAPERS

ICSE 2003 Workshop on
Software Architectures for Dependable Systems

Portland, Oregon - USA
3 May, 2003

http://www.cs.ukc.ac/wads

WORKSHOP ORGANIZERS

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Architectural representations of systems have shown to be effective in assisting the understanding of broader system concerns by abstracting away from details of the system. The dependability of systems is defined as the reliance that can justifiably be placed on the service the system delivers. Dependability has become an important aspect of computer systems since everyday life increasingly depends on software. Although there is a large body of research in dependability, architectural level reasoning about dependability is only just emerging as an important theme in software engineering. This is due to the fact that dependability concerns are usually left until too late in the process of development. In addition, the complexity of emerging applications and the trend of building trustworthy systems from existing, untrustworthy components are urging dependability concerns be considered at the architectural level. Hence the questions that the software architecture and dependability communities are currently facing: what are the architectural principles involved in building dependable systems? How should these architectures be evaluated?

By bringing together researchers from both the software architectures and the dependability communities, this workshop will make contributions from dependability more visible within the software engineering community and vice-versa, thus helping to build strong collaboration possibilities among the participants. The workshop will provide software engineers with systematic and disciplined approaches for building dependable systems, as well as allow further dissemination of the state of the art methods and techniques.

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, and to jointly formulate an agenda for future research in this emerging area. 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:

- dependability modeling in software architectures;
- verification and validation of dependable software architectures;
- adaptable architectures for achieving dependability;
- architectural support for self-healing and self-repairing systems
- run-time checks of dependable architectural model;
- dependability evaluation in software architectures;
- architectural patterns for dependable systems;
- exception handling for software architectures;
- redundancy and diversity at the level of architectures;
- dependable architecture and implementation.

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. All prospective participants should submit an extended abstract, work-in-progress report or position paper. The submissions must conform to the proceedings publication format and should not exceed six 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 (preferably in PDF format), by the submission date, to icse-wads@ukc.ac.uk.

The number of participants will be limited to 30, and it will be restricted to authors of accepted papers and to a few invited guests.

IMPORTANT DATES

Submission deadline: 15 February 2003
Author notification: 1 March 2003
Camera ready copy:1 April 2003