



Call for Papers

COMPONENT MODELS FOR DEPENDABLE SYSTEMS



Special track of the 31 Euromicro Conference on
Software Engineering and Advanced Applications (SEAA)

<http://www.idt.mdh.se/euromicro-2005>

Porto, Portugal, August 30th - September 3rd, 2005
exact date of the track is to be determined

IMPORTANT DATES

Submission of papers:
March 1st 2005

Notification of acceptance:
May 3rd 2005

Camera-ready paper due:
June 9th 2005

ORGANISATION

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Venue

[Porto University, Portugal](#)

Component based software engineering is being recognized as an important approach for reducing development-time and development cost. Many areas of automation, such as consumer electronics, medical systems, telecommunications, vehicle control (automotive, air, train, space) have high dependability requirements. In order to successfully apply the CBD approach to the building of dependable systems, component models are needed that include mechanisms for dealing with dependability properties in an integral manner. The aim of this workshop is to study mechanisms and techniques that enhance the CBD paradigm for dependable systems.

Major topics of interest include:

- Component models for resource-constrained/embedded devices
- Techniques and mechanisms for handling the following issues in component-based systems
 - Adaptability
 - Reliability
 - Fault-tolerance
 - Security
 - Safety
 - Timeliness / Real-Time,
- System Integrity Management
- Run-time contract checking of extra-functional properties
- Run-time system diagnosis and repair
- Exception handling mechanisms
- Remote System Management
- Software upgrade and dynamic reconfiguration in dependable systems
- Methods and Techniques for predicting and analysing non-functional properties of component-based systems
- Testing, Validation & Certification of dependability properties

Authors are strongly recommended to explain:

- the relation between the requirements of a domain and the different design choices made in the component model.
- the specific complications that arise from integrating the technique/mechanism in a component-based approach

Reviewing and publishing

Both regular papers and short contributions will be reviewed by the international Programme Committee and accepted on their scientific merit and relevance to the topics of the individual Tracks. The papers should not be published or submitted somewhere else. Accepted regular papers will be included in the proceedings. The conference proceedings will be published by the IEEE/CS and will be available at the conference. Papers should not exceed 8 pages (in IEEE/CS proceedings format; 10pt, single-space, double-column) or 6000 words and include an abstract of up to 150 words. Please visit the conference or tracks web pages for further information.

EUROMICRO SEAA conference is co-located with [Euromicro Conference on DSD](#)

Venue

The conference will take place at Porto University. The second-largest city in Portugal has a historical centre that is a UNESCO World Heritage Site.