Message from the Chairs
Component-Based Software Engineering Track
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Following the success of the first two Component-Based Software Engineering (CBSE) workshops in 2001 and 2002, the CBSE track in 2003, the track continues this year with its focus on certain new topics within the same field. CBSE is now widely recognized as an important sub-discipline of software engineering and in recent years CBSE topics have been addressed at many conferences. Component-based development has been used successfully in applications in many engineering and business domains such as desktop environments, graphing packages and mathematical applications. The components used in these domains have by their nature obvious functionalities and clearly-defined interfaces. Extra-functional characteristics and constraints (e.g., properties related to temporal constraints, dependability or safety) are usually not of the highest priority in these types of applications and component-based development technologies have rarely been used in the development of real-time, safety-critical, mission-critical, or, more generally, dependable systems. Such systems require reasoning about extra-functional aspects of system behavior and component models and technologies in use today do not provide support for this. The development of theories, methods, tools and techniques to support the prediction of the properties of systems in relation to the properties of components requires the collaboration of researchers and practitioners in different domains; for example software architecture, safety, object-oriented techniques, system and software modeling, etc. Indeed, many problems that arise in CBSE are already the foci of research in other communities. These communities show increasing interest in addressing their research and practical problems by applying component-based approach. This can be recognized in many contributions the track this year, for example in many contributions related to real-time and embedded systems.

The aim of the track is to continue the successful work begun at Euromicro 2001 – to bring together practitioners and researchers from academia and industry to discuss and improve the theories, technologies, and processes of component-based software engineering development. We have encouraged the submission of papers of a theoretical nature and experience reports from academia and especially from industry, and indeed, a good balance between these two types of submissions and communities has been achieved.

In the Call for Papers the suggested areas of interest were grouped in the following categories:

- Component models and technologies
- Dependability of component-based systems
- Component specifications
- Components for real-time and embedded systems
- Component compositions
- Components and Quality Attributes
- Component-based software architecture
- COTS components
- Component-based requirements engineering
- Middleware solutions for CBSE
- Evaluation of components
- Development environment and tools
- Component design, implementation, testing
- Component development processes
- Software component markets and businesses
- Evolution of Component-based applications
- CBSE organizational issues
- Software product-line approach
- CBSE and emerging disciplines (services, MDA, Agent-based programming, aspect-oriented programming)
- Case studies and experience reports

This year we have received so far the highest number of submissions: 41 papers have been submitted. Each paper was evaluated by three or four reviewers and the acceptance decision was based on their evaluations. A total of 21 papers
were accepted. They will be presented at the following sessions:
- Components for real-time and embedded systems (two session)
- Component compositions
- Components and Quality Attributes
- COTS components
- Development environment and tools
- CBSE processes and modeling

From the nature of the papers selected, we can conclude that in difference from previous years, the interest have been grouped in different engineering and application domains, development tools and analysis of extra-functional properties. On the other hand, component tests, evaluation, and requirement management are not discussed in the accepted papers nor have the software product-line approach, aspect-oriented programming, and processes been given particular consideration.

We would like to thank the Program Committee members for their help in reviewing the papers. I hope you will find the CBSE track interesting and simulating and will continue to contribute to its success in the coming years.

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