Message from the Chair

Component-Based Software Engineering Track

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This CBSE track is fifth in a row at Euromicro Conference on Software engineering and advanced applications, reaching a stable level of constant slight increase of quality and number of submission. The track continues this year with its focus on certain new topics that address software complexity by increasing abstraction level, for example model-based development. 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 precisely defined functions 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. In recent years we can see a trend of creation of component models in new domains, such as in real-time, safety-critical, mission-critical, or, more generally, dependable systems. The communities from these domains show increasing interest in addressing their research and practical problems by applying component-based approach. We also see a trend combination of different approaches, such as component-based software engineering and aspect-oriented programming.

CBSE is now widely recognized as an important subdiscipline of software engineering and in recent years CBSE topics have been addressed at many conferences. There exists three to four workshops or symposia dedicated to CBSE. Euromicro SEAA CBSE track belong to them.

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. The CBSE track, sixth in a row, has a goal to point out the overall challenges and problems of the component-based approach, but also show the new ideas, solutions and practices.

In the Call for Papers the suggested areas of interest were grouped in the following categories:
- Component models and technologies
- Component development processes
- Component specifications Evaluation of components
- Component-based software architecture COTS components
- Components and Quality Attributes
- Components and Open Source
- Component compositions - modeling, static and dynamic (plug-in) compositions
- CBSE organizational issues
- Middleware solutions for CBSE
- Component markets and businesses
- Component design, implementation, testing
- Case studies and experience reports
- Dependability of component-based systems
- Development environment and tools
- Components for real-time and embedded systems
- CBSE and emerging disciplines (services, model-driven development, aspect-oriented programming, etc.)

This year we have received, fourth time in a row, the largest number of submissions: 47 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. In the period of six years the quality of the papers has been clearly improved. The papers will be presented at the following sessions:
- Session I - Component models and technologies
- Session II - Component modelling and specifications
- Session III - Architecting component-based systems
- Session IV - Components for real-time and embedded systems
- Session V - Dependability of component-based systems
- Session VI - CBSE, related and emerging disciplines

From the nature of the papers selected, we can conclude that the topics are similar as the previous year. The interests have been grouped technologies, architectural analysis and design and process improvements, embedded and real-time systems, and dependable
systems. This year there has been several contributions in related areas.

We would like to thank the Program Committee members for their help in reviewing the papers. The review process has been of high quality and went smoothly thanks to excellent cooperation of the PC.

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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