

Preface

The component-based software development approach has emerged as a promising paradigm to cope with the complexity of present-day software systems by bringing sound engineering principles into software engineering. However, many challenging conceptual and technological issues still remain in this area, theoretically as well as practically. Moreover, the advent of cloud computing, cyber-physical systems, and of the Internet of Things has brought to the fore new dimensions, such as quality of service, reconfiguration, and robustness to withstand inevitable faults, which require established concepts to be revisited and new ones to be developed in order to meet the opportunities offered by those architectures.

That was emphasized by the program of FACS 2016. Several sessions and invited talks were devoted to formal analysis and model-based development, whereas a practical session focused on applications and experience. Security aspects were present, too, in particular at an invited talk. Finally, the last two sessions dealt with operations on components.

A total of 14 papers successfully passed the review process, showing that component-based development is still an active research field.

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