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# Formal Aspects of Component Software

8th International Symposium, FACS 2011  
Oslo, Norway, September 14-16, 2011  
Revised Selected Papers



Springer

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# Preface

This volume contains the revised versions of accepted regular papers presented at the 8th International Symposium on Formal Aspects of Component Software (FACS 2011), held at the Department of Informatics, University of Oslo, on September 14–16, 2011. It also contains contributions by the three invited speakers at this event: José Meseguer, John Rushby, and Ketil Stølen.

FACS 2011 was the eighth event in a series founded by the International Institute for Software Technology of the United Nations University (UNU-IIST). The objective of FACS is to bring researchers and practitioners of component software and formal methods together in order to foster a deeper understanding of reliable component-based systems development and their applications, using formal methods. 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 the theory and practice of component-based software development. Moreover, the advent of service-oriented computing has brought to the fore new dimensions, such as quality of service and robustness to withstand inevitable faults, that require revisiting established component-based concepts in order to meet the new requirements of the service-oriented paradigm.

We received 46 submissions from 26 countries, out of which the Program Committee accepted 16 as regular papers, and, furthermore, conditionally accepted 4 additional papers. The revised versions of 18 of these papers appear in this volume. Each submission to FACS 2011 was reviewed by at least three referees.

Many colleagues and friends contributed to FACS 2011. First, we thank the authors who submitted their work to FACS 2011 and who, by their contributions and participation, made this symposium a high-quality event. We thank the Program Committee members and their sub-reviewers for their timely and insightful reviews as well as for their involvement in the post-reviewing discussions. We are also grateful to the FACS Steering Committee for its guidance, to the invited speakers, and to Lucian Bentea for all his assistance in organizing this event. Finally, we thank Andrei Voronkov for the excellent EasyChair conference system, and the Research Council of Norway and the Department of Informatics at the University of Oslo for financially supporting the symposium.

April 2012

Farhad Arbab  
Peter Ölveczky

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