Preface

In spite of extensive research on formal methods and many efforts on transferring the technology to industry over the last three decades, how to enable practitioners to easily and effectively use formal techniques still remains challenging. The Structured Object-Oriented Formal Language (SOFL) has been developed to address this challenge by providing a comprehensive specification language, a practical modeling method, various verification and validation techniques, and tool support through effective integration of formal methods with conventional software engineering techniques. SOFL integrates data flow diagram, Petri nets, and VDM-SL to offer a visualized and formal notation for constructing specification; a three-step approach to requirements acquisition and system design; specification-based inspection and testing methods for detecting errors in both specifications and programs; and a set of tools to support modeling and verification. The Modeling, Simulation and Verification Language (MSVL) is a parallel programming language. Its supporting toolkit MSV has been developed to enable us to model, simulate, and verify a system in a formal manner.

Following the success of the previous SOFL+MSVL workshops, the 6th international workshop on SOFL+MSVL 2016 was jointly organized in Tokyo by Shaoying Liu’s research group at Hosei University, Japan, and Zhenhua Duan’s research group at Xidian University, China, with the aim of bringing together industrial, academic, and government experts and practitioners of SOFL or MSVL to communicate and to exchange ideas. Also, one invited keynote talk was on verification of Web applications. The keynote speaker was Prof. Huaikou Miao, Shanghai University, China. The workshop attracted 26 submissions on specification-based testing, specification inspection, model checking, formal verification, formal semantics, and formal analysis. Each submission was rigorously reviewed by two or more Program Committee members on the basis of its technical quality, relevance, significance, and clarity, and 13 papers were accepted for publication in the workshop proceedings. The acceptance rate is 50%.

We would like to thank ICFEM 2016 for supporting the organization of the workshop, all of the Program Committee members for their great efforts and cooperation in reviewing and selecting the papers, and our postgraduate students for their various help. We would also like to thank all of the participants for attending presentation sessions and actively joining discussions at the workshop. Finally, our gratitude goes to Alfred Hofmann and Christine Reiss of Springer for their continuous support in the publication of the workshop proceedings.

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