Abstract State Machines

Theory and Applications

International Workshop, ASM 2000
Monte Verità, Switzerland, March 19-24, 2000
Proceedings
Preface

The ASM 2000 workshop was held in the conference center of the Swiss Federal Institute of Technology (ETH) at Monte Verità, Canton Ticino, March 19-24, 2000.

The ASM formalism was proposed together with the thesis that it is suitable to model arbitrary computer systems on arbitrary abstraction levels. ASMs have been successfully used to analyze and specify various hardware and software systems including numerous computer languages.

The aim of the workshop was to bring together domain-experts, using ASMs as a practical specification method, and theorists working with ASMs and related methods. In addition the workshop served as a forum on theoretical and practical topics that relate to ASMs in a broad sense. Three tutorials including hands-on experience with tools were organized by U. Glässer and G. del Castillo (on the topic “Specifying Concurrent Systems with ASMs”), H. Rüss and N. Shankar (on the topic “A Tutorial Introduction to PVS”), M. Anlauff, P.W. Kutter, and A. Pierantonio (on the topic “Developing Domain Specific Languages”).

In response to the organization committee’s call for papers, 30 papers were submitted, each of which was independently reviewed by four members of the program committee. This volume presents a selection of 12 of the refereed papers and two reports on industrial ASM application at Siemens AG and Microsoft Research, together with contributions based on the invited talks given by A. Blass (University of Michigan), E. Börger (University of Pisa), G. Goos (University of Karlsruhe), M. Odersky (Swiss Federal Institute of Technology (EPFL), Lausanne), W. Reisig (Humboldt University Berlin), and N. Shankar (SRI International). The introduction written by E. Börger gives an overview on ASM research from the beginning to the present.

On behalf of the program committee, we would like to express our appreciation to the six lecturers who accepted our invitation to speak, to the tutorial organizers, to all the authors who submitted papers to ASM 2000 and to the Centro Stefano Franscini (CSF) at Monte Verità and the local organizers who made the workshop possible.

June 2000

Y.Gurevich, P.W.Kutter, M.Odersky, and L. Thiele
ASM 2000 took place from March 19th to 24th at the conference center Monte Verità of the Swiss Federal Institute of Technology (ETH).

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