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FME 2003: Formal Methods

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Preface

This volume contains the proceedings of FM 2003, the 12th International Formal Methods Europe Symposium which was held in Pisa, Italy on September 8–14, 2003. Formal Methods Europe (FME, www.fmeurope.org) is an independent association which aims to stimulate the use of and research on formal methods for system development. FME conferences began with a VDM Europe symposium in 1987. Since then, the meetings have grown and have been held about once every 18 months. Throughout the years the symposia have been notably successful in bringing together researchers, tool developers, vendors, and users, both from academia and from industry.

Unlike previous symposia in the series, FM 2003 was not given a specific theme. Rather, its main goal could be synthesized as "widening the scope." Indeed, the organizers aimed at enlarging the audience and impact of the symposium along several directions. Dropping the suffix 'E' from the title of the conference reflects the wish to welcome participation and contribution from every country; also, contributions from outside the traditional Formal Methods community were solicited. The recent innovation of including an Industrial Day as an important part of the symposium shows the strong commitment to involve industrial people more and more within the Formal Methods community. Even the traditional and rather fuzzy borderline between "software engineering formal methods" and methods and formalisms exploited in different fields of engineering was somewhat challenged. This is in recognition of the increasing need to look at and to understand systems (often hybrid systems) in their entirety: something that should have a higher priority than focusing on the specific software issues that in most cases just relate to a component of the whole system.

All in all we can claim to have made significant steps towards our goal of widening our scope, although, certainly, many challenges are still open. In particular, we were very happy with the paper submissions: 144 papers were submitted from 27 countries of all continents. Submitted papers were of both theoretical and applicative nature, and were overall of high quality. Not only were the 44 accepted papers selected according to our traditional high standards, but the Program Committee board also recognized significant potential contributions in many papers that had to be rejected, mostly due to their fairly preliminary development stage. Four of the 44 accepted papers were selected for presentation during the Industry Day. Besides the refereed papers, these proceedings include contributions from the following invited speakers: Kouichi Kishida, Brian Randell, Gerard Holzmann, and Jean-Raymond Abrial. Finally, we emphasize the importance and quality of numerous satellite events: besides the Industry Day, eight tutorials, seven workshops, and a rich tool fair completed the program of the symposium. Enjoy reading!

September 2003

Keijiro Araki, Stefania Gnesi and Dino Mandrioli

Organization

FM 2003 was organized by Formal Methods Europe, the Institute for Informatics Science and Technology (ISTI) of the National Research Council of Italy, and CoLogNet.

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Pamela Zave AT&T Labs, USA

External Referees

The Program Committee members and the external referees listed below did an excellent job in managing an unexpectedly high number of submissions under the usual pressure of strict deadlines. All papers were refereed by at least three reviewers. Reports were thorough, detailed, and rich with constructive suggestions even when rejection was recommended. Both PC members and external referees further contributed to the active and intense "e-discussion" that led to the final decision. We are very happy to acknowledge such a superb contribution to the quality of these proceedings.

Referees

Ana Cavalcanti

Ivana Cerna

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