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Joost-Pieter Katoen (Ed.)

Formal Methods for Real-Time and Probabilistic Systems

5th International AMAST Workshop, ARTS'99
Bamberg, Germany, May 26-28, 1999
Proceedings

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Volume Editor

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Foreword

The aim of the ARTS'99 workshop is to bring together researchers and practitioners interested in the design of real-time and probabilistic systems. It is intended to cover the whole spectrum of development and application of specification, verification, analysis and construction techniques for real-time and probabilistic systems. Being a workshop under the umbrella of the AMAST movement (Algebraic Methodology And Software Technology), ARTS is intended to provide a forum for the presentation of approaches that are based on a clear mathematical basis. Aspects of real-time and probabilistic systems for the workshop include (but are not limited to): compositional construction and verification techniques, automatic and machine-supported verification, case studies, formal methods for performance analysis, semantics, algorithms and tools, and hybrid systems.

ARTS'99 was organised by the Lehrstuhl für Informatik 7 at the University of Erlangen-Nürnberg and took place at the Städtliche Volkshochschule in Bamberg (Oberfranken), Germany from May 26–28, 1999. Previous editions of ARTS workshops were organized by the University of Iowa, USA (1993), University of Bordeaux, France (1995), Brigham Young University, USA (1996), and General Systems Development, Mallorca, Spain (1997). Previous proceedings appeared as LNCS 1231 or as books in the AMAST Series of Computing.

The Program Committee selected 17 papers from a total of 33 submissions. Each submitted paper was sent to three Program Committee members, who were often assisted by sub-referees. During a one-week discussion via e-mail, the Program Committee has made the selection of the papers on the basis of the reviews. This volume contains the 17 selected papers plus 3 invited papers (in either full or abstract form).

I would like to thank the Program Committee members and the sub-referees for their efforts. I also like to thank the invited speakers for giving a talk at the workshop and for their contribution to the proceedings. Special thanks to Ulrich Herzog, Chris Moog, Teodor Rus, Diego Latella and Ruth Abraham (Springer-Verlag) for their support. Without their help, this event would not have been possible.

March 1999

Joost-Pieter Katoen
Program Chair
ARTS'99

Invited Speakers

Bengt Jonsson	(Uppsala University, Sweden)
Frits W. Vaandrager	(University of Nijmegen, The Netherlands)
Moshe Y. Vardi	(Rice University, USA)

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German Research Council (Deutsche Forschungsgemeinschaft)

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