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Automated Technology for Verification and Analysis

10th International Symposium, ATVA 2012
Thiruvananthapuram, India, October 3-6, 2012
Proceedings



Springer

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ISSN 0302-9743	e-ISSN 1611-3349
ISBN 978-3-642-33385-9	e-ISBN 978-3-642-33386-6
DOI 10.1007/978-3-642-33386-6	

Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2012946628

CR Subject Classification (1998): D.2, D.1, F.3, C.2-3, D.3, C.2.4

LNCS Sublibrary: SL 2 – Programming and Software Engineering

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Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

This volume contains the invited and contributed papers presented at the 10th International Symposium on Automated Technology for Verification and Analysis (ATVA 2012), held at Thiruvananthapuram (Trivandrum), India, during October 3–6, 2012. Over the last decade, ATVA has established itself as a premier venue for researchers and practitioners working on both theoretical and practical aspects of automated analysis, verification and synthesis of computing systems. The conference has also historically provided a forum for interaction between the regional and international research communities working in these areas. The rich legacy of ATVA continued this year as well, resulting in a very strong technical programme.

We received a total of 80 regular submissions and 9 tool submissions, excluding those that were incomplete, outside the scope of the conference, or concurrently submitted elsewhere. The submissions came from 20 different countries spanning 4 continents. Each submission was reviewed by at least 4, and in some cases even 6, reviewers. The Programme Committee sought the help of 145 external expert reviewers for detailed evaluations of the submissions. This was followed by two and a half weeks of extensive and spirited discussions among the members of the Programme Committee, based on which 25 regular papers and 4 tool papers were finally accepted.

The conference was privileged to have three distinguished computer scientists as invited speakers. Sharad Malik (Princeton University, USA), Andreas Podelski (University of Freiburg, Germany) and P.S. Thiagarajan (National University of Singapore, Singapore) readily agreed to give tutorials and invited talks at the conference. We thank all of them for enriching the conference with their participation.

It has been an absolute pleasure working with 35 distinguished colleagues from 16 countries as part of the Programme Committee. We thank all of them for helping spread the call for papers, providing detailed reviews for the submissions, participating in the online discussions with tremendous energy and enthusiasm, providing critical comments and useful suggestions whenever needed, and for everything else that helped shape the strong technical programme that we finally arrived at.

We thank the Steering Committee of ATVA for giving us the opportunity to host this conference in India for the first time. We also thank members of the Steering Committee for providing guidance on various aspects of planning of the conference.

The Organizing Committee of the conference put in several months of hard work to ensure that every aspect of the organization of the conference was attended to in detail. We thank all members of the Organizing Committee for their dedication to the success of the conference. Kumar Madhukar helped with

several logistical aspects, including designing and maintaining the conference webpage, creating posters and handling email enquiries. We thank him for his contribution to the success of the conference. We also thank S. Ramesh, General Chair of the conference, for providing helpful guidance whenever it was needed.

From the time we drafted the proposal for hosting ATVA 2012 in India, Tata Consultancy Services has been unwavering in its support to the Indian Association for Research in Computing Science (IARCS) for making the conference a success. The helping hand lent by Tata Consultancy Services in every aspect of planning and organizing the conference deserves special mention. R. Venkatesh played a crucial role in our interactions with Tata Consultancy Services. We thank him for his special efforts in this regard.

A conference like ATVA cannot succeed without significant financial help from various agencies. We thank IARCS, Tata Consultancy Services, Microsoft Research India, Special Interest Group in Software Engineering of the Computer Society of India, and Corporate Research Technologies of Siemens Technology and Services Pvt. Ltd. for providing sponsorship to make the conference a success.

Finally, we thank the Easychair team for providing us with an excellent paper and review management system that made the entire process of reviewing and compiling the proceedings smooth. We also thank Springer for publishing the proceedings as a volume in the series Lecture Notes in Computer Science, and for all the editorial help rendered by them in compiling the proceedings.

October 2012

Supratik Chakraborty
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