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Dang Van Hung · Oleg Sokolsky (Eds.)

Automated Technology for Verification and Analysis

18th International Symposium, ATVA 2020 Hanoi, Vietnam, October 19–23, 2020 Proceedings



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Preface

This volume contains the papers presented at the 18th International Symposium on Automated Technology for Verification and Analysis (ATVA 2020) held in Hanoi, Vietnam, during October 19–23, 2020.

The ATVA series of symposia is dedicated to promoting research in theoretical and practical aspects of automated analysis, verification, and synthesis by providing an international venue for the researchers to present new results. At the same time, they provide a forum for interaction between the regional and international research communities and industry in the field.

ATVA 2020 received 75 full paper submissions coauthored by researchers from 29 countries. Each submission was reviewed by at least three Program Committee (PC) members with the help from reviewers outside the PC. After 10 days of online discussions, the committee decided to accept 32 papers for presentation at the conference.

We would like to express our gratitude to all the researchers who submitted their work to the symposium. We are particularly thankful to all colleagues who served on the PC, as well as the external reviewers, whose hard work in the review process helped us prepare the conference program. The international diversity of the PC as well as external reviewers is noteworthy as well: PC members and external reviewers have affiliations with institutes in 20 countries.

Special thanks go to the three invited speakers – Tobias Nipkow, from TU Munich, Germany; Klaus Havelund, from CalTech and NASA JPL, USA; and David Dill, from Stanford University, USA. The papers of the two first invited talks are included in this volume.

A number of colleagues have worked very hard to make this conference a success. We wish to express our thanks to the Local Organizing Committee: Hung Pham Ngoc, Hieu Vo Dinh, and many student volunteers. We would also like to thank the University of Engineering and Technology of the Vietnam National University, Hanoi, Vietnam, the host of the conference, who provided various support and facilities for organizing the conference and its tutorials. Finally, we are thankful for the institutional and financial support from Vingroup Innovation Foundation (VINIF) and Toshiba Software Development in Vietnam (TSDV).

The conference program was prepared with the help of EasyChair. We thank Springer for continuing to publish the conference proceedings.

October 2020

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