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Leila Ribeiro · Thierry Lecomte (Eds.)

Formal Methods: Foundations and Applications

19th Brazilian Symposium, SBMF 2016
Natal, Brazil, November 23–25, 2016
Proceedings

Editors

Leila Ribeiro
Universidade Federal do Rio Grande do Sul
Porto Alegre
Brazil

Thierry Lecomte
ClearSy
Aix en Provence
France

ISSN 0302-9743

ISSN 1611-3349 (electronic)

Lecture Notes in Computer Science

ISBN 978-3-319-49814-0

ISBN 978-3-319-49815-7 (eBook)

DOI 10.1007/978-3-319-49815-7

Library of Congress Control Number: 2016958976

LNCS Sublibrary: SL2 – Programming and Software Engineering

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Printed on acid-free paper

This Springer imprint is published by Springer Nature

The registered company is Springer International Publishing AG

The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

This volume contains the papers presented at SBMF 2016: the 19th Brazilian Symposium on Formal Methods. The conference was held in Natal, Brazil, during November 23–25, 2016. The Brazilian Symposium on Formal Methods (SBMF) is an event devoted to the dissemination of the development and use of formal methods for the construction of high-quality computational systems, aiming to promote opportunities for researchers with interests in formal methods to discuss the recent advances in this area. SBMF is a consolidated scientific-technical event in the software area. Its first edition took place in 1998, reaching the 19th edition in 2016. The proceedings of the last editions have been published in Springer’s *Lecture Notes in Computer Science* series as volumes 5902 (2009), 6527 (2010), 7021 (2011), 7498 (2012), 8195 (2013), 8941 (2014), and 9526 (2015).

The conference included two invited talks, given by Augusto Sampaio (UFPE, Brazil) and Michael Leuschel (University of Düsseldorf, Germany), and a tutorial, given by Ana Cristina Vieira Melo (USP, Brazil). A total of 12 papers were presented at the conference and are included in this volume. They were selected from 22 submissions that came from ten different countries: Algeria, Argentina, Brazil, Canada, Ecuador, Estonia, Finland, Italia, Portugal, South Africa, and Venezuela. The Program Committee comprised 47 members from the national and international community of formal methods. Each submission was reviewed by three Program Committee members. The process of submissions by the authors, paper reviews, deliberations of the Program Committee, as well as proceedings elaboration were all assisted by EasyChair, which provided excellent support for these tasks.

We are grateful to the Program Committee, and to the additional reviewers, for their hard work in evaluating submissions and suggesting improvements. We are very thankful to the general chair of SBMF 2016, Marcel Oliveira (UFRN), and the local organization team, who made everything possible for the conference to run smoothly, and to IMD (Instituto Metrópole Digital) that kindly hosted the event. SBMF 2016 was organized by Federal University of Rio Grande do Norte (UFRN), promoted by the Brazilian Computer Society (SBC), and sponsored by the following organizations, which we thank for their generous support: CAPES, CNPq, UFRN, and ClearSy System Engineering. Finally, we would like to thank Springer for agreeing to publish the proceedings as a volume of *Lecture Notes in Computer Science*.

November 2016

Leila Ribeiro
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