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Cezar Câmpeanu (Ed.)

Implementation and Application of Automata

23rd International Conference, CIAA 2018
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Preface

This volume contains the papers presented at the 23rd International Conference on Implementation and Application of Automata (CIAA 2018) organized by the School of Mathematical and Computational Science, University of Prince Edward Island, during July 30 – August 2, 2018, in Charlottetown, Prince Edward Island, Canada. The CIAA conference series is a major international venue for the dissemination of new results in the implementation, application, and theory of automata.

There were 39 submissions from 19 different countries: Algeria, Bulgaria, Canada, China, France, Finland, France, Germany, India, Israel, Italy, Japan, Pakistan, Poland, Russia, Singapore, Slovakia, South Africa, South Korea, Sweden, and the USA. Each submission was reviewed by at least three reviewers and thoroughly discussed by the Program Committee (PC). The committee decided to accept 23 papers for oral presentation and publication in this volume. The program also includes four invited talks by Anne Condon, Stavros Konstantinidis, Andreas Malcher, and Jacques Sakarovitch.

The previous 22 conferences were held in various locations all around the globe: Paris (2017), Seoul (2016), Umeå (2015), Giessen (2014), Halifax (2013), Porto (2012), Blois (2011), Winnipeg (2010), Sydney (2009), San Francisco (2008), Prague (2007), Taipei (2006), Nice (2005), Kingston (2004), Santa Barbara (2003), Tours (2002), Pretoria (2001), London Ontario (2000), Potsdam (WIA 1999), Rouen (WIA 1998), and London Ontario (WIA 1997 and WIA 1996). Like its predecessors, the theme of CIAA 2018 was the implementation of automata and applications in related fields. The topics of the presented papers include state complexity of automata, implementations of automata and experiments, enhanced regular expressions, and complexity analysis.

I would like to thank to the members of the PC and the external reviewers for their help in selecting the papers. I am very grateful to all invited speakers, authors of submitted papers, and participants who made CIAA 2018 possible. I also note that the work of the PC and the preparation of the proceedings were greatly simplified by the EasyChair conference system.

I also appreciate the help of the editorial staff at Springer in producing this book, in particular to Alfred Hofmann, Anna Kramer, and their Computer Science Editorial team, for their guidance and help during the process of publishing this volume and for supporting the event through publication in the LNCS series.

Finally, I am grateful to the conference sponsors: the University of Prince Edward Island (the President, the Vice President of Academics and Research, the Dean of Science, and the Associate Dean of School of Mathematical and Computational

Science), and the Atlantic Association for Research in the Mathematical Sciences (AARMS) for their generous financial support, and Meetings & Conventions PEI for their continuous logistic support.

We all look forward to seeing you at CIAA 2019 in Kosice, Slovakia!

May 2018

Cezar Câmpeanu

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