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María Alpuente (Ed.)

# Logic-Based Program Synthesis and Transformation

20th International Symposium, LOPSTR 2010  
Hagenberg, Austria, July 23-25, 2010  
Revised Selected Papers

Volume Editor

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# Preface

This volume contains a selection of the papers presented at the 20th International Symposium on Logic-Based Program Synthesis and Transformation, LOPSTR 2010, which was held July 23–25, 2010, as a part of the RISC Summer 2010 in Hagenberg, Austria. LOPSTR 2010 was co-located with PPDP 2010, the 12th International ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming. Previous LOPSTR symposia were held in Coimbra (2009), Valencia (2008), Lyngby (2007), Venice (2006 and 1999), London (2005 and 2000), Verona (2004), Uppsala (2003), Madrid (2002), Paphos (2001), Manchester (1998, 1992, and 1991), Leuven (1997), Stockholm (1996), Arnhem (1995), Pisa (1994), and Louvain-la-Neuve (1993). Information about the conference can be found at: <http://www.risc.jku.at/about/conferences/lopstr2010/>.

The aim of the LOPSTR series is to stimulate and promote international research and collaboration in logic-based program development. LOPSTR traditionally solicits contributions, in any language paradigm, in the areas of specification, synthesis, verification, analysis, optimization, specialization, security, certification, applications and tools, program/model manipulation, and transformational techniques. LOPSTR has a reputation for being a lively, friendly forum for presenting and discussing work in progress. Formal proceedings are produced only after the symposium so that authors can incorporate this feedback in the published papers.

I would like to thank all those who submitted contributions to LOPSTR in the categories of full papers and extended abstracts. In response to the call for papers, 26 contributions were submitted from 15 different countries. Each paper was reviewed by at least three Program Committee members or external referees. The Program Committee selected five full papers for immediate inclusion in the final proceedings, and eight papers were accepted after revision and another round of reviewing. In addition to the 13 contributed papers, this volume also includes contributions by two invited speakers: Olivier Danvy (University of Aarhus, Denmark) and Johann Schumann (RIACS/NASA Ames Research Center, USA).

I want to thank the Program Committee members, who worked diligently to produce high-quality reviews for the submitted papers, as well as all the external reviewers and the invited speakers, for devoting time and effort to help make this conference a success. I am very grateful to the LOPSTR 2010 Conference Chair, Temur Kutsia, and the local organizers of RISC Summer 2010 for the great job they did in preparing the conference. I also thank Andrei Voronkov for his excellent EasyChair system that automates many of the tasks involved in chairing a conference. Finally, I gratefully acknowledge the Research Institute for Symbolic Computation (RISC) of the Johannes Kepler University of Linz, which sponsored this event.

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