Michael Hanus
Ricardo Rocha (Eds.)

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Declarative Programming and Knowledge Management

Declarative Programming Days, KDPD 2013
Unifying INAP, WFLP, and WLP, Kiel, Germany, September 11–13, 2013
Revised Selected Papers

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Preface

This volume contains a selection of papers presented at the Kiel Declarative Programming Days 2013, held in Kiel (Germany) during September 11–13, 2013. The Kiel Declarative Programming Days 2013 unified the following events:

- 20th International Conference on Applications of Declarative Programming and Knowledge Management (INAP 2013)
- 22nd International Workshop on Functional and (Constraint) Logic Programming (WFLP 2013)
- 27th Workshop on Logic Programming (WLP 2013)

All these events are centered around *declarative programming*, an advanced paradigm for the modeling and solving of complex problems. These specification and implementation methods attracted increasing attention over the last decades, e.g., in the domains of databases and natural language processing, for modeling and processing combinatorial problems, and for high-level programming of complex, in particular, knowledge-based systems.

The INAP conferences provide a communicative forum for intensive discussion of applications of important technologies around logic programming, constraint problem solving, and closely related computing paradigms. It comprehensively covers the impact of programmable logic solvers in the Internet society, its underlying technologies, and leading-edge applications in industry, commerce, government, and societal services. Previous INAP editions have been held in Japan, Germany, Portugal, and Austria.

The international workshops on functional and logic programming (WFLP) aim at bringing together researchers interested in functional programming, logic programming, as well as the integration of these paradigms. Previous WFLP editions have been held in Germany, France, Spain, Italy, Estonia, Brazil, Denmark, and Japan.

The workshops on (constraint) logic programming (WLP) serve as the scientific forum of the annual meeting of the Society of Logic Programming (GLP e.V.) and bring together researchers interested in logic programming, constraint programming, and related areas like databases, artificial intelligence, and operations research. Previous WLP editions have been held in Germany, Austria, Switzerland, and Egypt.

In 2013 these events were jointly organized under the umbrella of the Kiel Declarative Programming Days in order to promote the cross-fertilizing exchange of ideas and experiences among researchers and students from the different communities interested in the foundations, applications, and combinations of high-level, declarative programming languages and related areas. The technical program of the event included presentations of refereed technical papers and system descriptions. In addition to the selected papers, the scientific program included an invited lecture by Tom Schrijvers (University of Ghent, Belgium).

After the event, the Program Committees invited authors to submit revised versions of their presented papers. Each submission was reviewed by at least three Program Committee members. The meetings of the Program Committees were conducted electronically during July 2013 and February 2014 with the help of the conference management system EasyChair. After careful discussions, the Program Committees decided to accept 15 papers for inclusion in these proceedings.

We would like to thank all authors who submitted papers to this event. We are grateful to the members of the Program Committees and all the additional reviewers for their careful and efficient work in the review process. Finally, we express our gratitude to all members of the local Organizing Committee for their help in organizing a successful event.

April 2014

Michael Hanus
Ricardo Rocha

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