

Preface

This volume contains the conference proceedings of the 38th German Conference on Artificial Intelligence, KI 2015, which was held 21–25 September 2015 in Dresden, Germany. Starting as German Workshop on AI (GWAI) in 1975, this annual event traditionally brings together academic and industrial researchers from all areas of AI, providing a premier forum for exchanging news and research results on theory and applications of intelligent system technology.

This year, the conference was preceded by an international summer school on reasoning organized by the International Center for Computational Logic. Nine workshops with their own proceedings were held on the first two days of the conference. In addition, a doctoral consortium provided doctoral researchers the opportunity to obtain feedback on their work. The research outlines are included in the KI proceedings.

The conference received 59 submissions (involving authors from 22 countries), of which 48 were research papers (RPs), and 11 were technical communications (TCs), a more concise paper format that was introduced for the first time this year. TCs provide the opportunity to present a wider range of results and ideas that are of interest to the KI audience, including reports about researchers' own recent publications, position papers, and previews of ongoing work. In a rigorous reviewing process, 15 research papers were selected for publication (31% of 48 submitted RPs), while another 14 submissions were accepted as TCs. On top of these conference papers, the volume also features the four accepted contributions to the KI 2015 Doctoral Consortium.

We thank all Program Committee members and additional reviewers for their invaluable effort in thoroughly assessing and discussing the submitted contributions. Special thanks are due to Riccardo Rosati, who acted as an External Program Chair, in order to coordinate the review of all papers that involved authors from TU Dresden.

For KI 2015 we were happy to secure the participation of three distinguished scientists as keynote speakers: Molham Aref (LogicBlox, USA) delivered a talk about declarative probabilistic programming, Ross D. King (University of Manchester) provided insights into his work with robot scientists, and Francesca Rossi (University of Padova) addressed safety and ethical issues in systems for collective decision making. Abstracts of each invited talk are included in this volume.

A number of people were involved in the organization of this conference. We would like to thank our Sponsorship Chair, Saartje Brockmans, our Publicity Chair, Simone Paulo Ponzetto, as well as the local organization team, in particular Emmanuelle-Anna Dietz, Norbert Manthey, and Peter Steinke. We further thank our Workshop Chair, Anni-Yasmin Turhan, and all workshop organizers. We also gratefully acknowledge the support of our sponsors. In particular, we thank the main conference sponsors *arago* (platinum) and *STI Innsbruck* (gold), as well as all other sponsors and partners as mentioned on the following pages. Moreover, we appreciate the assistance and

professional service provided by the Springer LNCS editorial and publishing teams. Finally, thanks are due to all authors and participants of KI 2015; we hope that their stay in Dresden was most profitable and enjoyable.

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