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Automated Reasoning

6th International Joint Conference, IJCAR 2012
Manchester, UK, June 26-29, 2012
Proceedings

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Preface

This volume contains the proceedings of the 6th International Joint Conference on Automated Reasoning (IJCAR 2012) held during June 26–29, 2012, in Manchester, UK. This year’s meeting was a merging of several leading events in automated reasoning, namely, CADE (International Conference on Automated Deduction), FroCoS (International Symposium on Frontiers of Combining Systems), FTP (International Workshop on First-Order Theorem Proving), and TABLEAUX (International Conference on Automated Reasoning with Analytic Tableaux and Related Methods). During the meeting there were four different systems competitions and, during the two days following the meeting, there were 15 workshops. IJCAR 2012 was part of the Alan Turing Year 2012 and colocated with The Alan Turing Centenary Conference held June 22–25, 2012. Previous editions of IJCAR took place in Siena, Italy (2001), Cork, Ireland (2004), Seattle, USA (2006), Sydney, Australia (2008) and Edinburgh, UK (2010).

The call for papers invited authors to submit either full papers (of 15 pages) or system descriptions (of seven pages). We received a total of 116 submissions and eventually accepted 32 full papers and nine system descriptions. Each submission was reviewed by at least three Program Committee members and their selected reviewers.

We are pleased that Nikolaj Bjørner, Yuri Matiyasevich, Robert Nieuwenhuis, and Nicole Schweikardt accepted to give invited talks during the technical part of the program. We are also honored that Peter Andrews, Martin Davis, and John Alan Robinson, three pioneers in automated reasoning, accepted to give evening talks. Another highlight was the Herbrand Award ceremony, where CADE Inc. honored Melvin Fitting for his exceptional contributions to the field of automated deduction.

We wish to thank the Program Committee members and their reviewers for their efforts in helping to evaluate the submissions. They have generously shared their knowledge of the field and provided the authors with helpful feedback: it has been a pleasure to work with them. The EasyChair conference management system was a great help in dealing with all aspects of putting together our program and the proceedings.

We also wish to thank the sponsors of this meeting: the *Artificial Intelligence Journal*, Microsoft Research, and the University of Manchester.

The local organization of the conference as well as the organization of its satellite events and competitions are challenging, time-consuming tasks, and we are extremely thankful to everybody who volunteered to contribute to these, in particular but not restricted to Vicki Chamberlin, Birte Glimm, Konstantin Korovin, Ruth Maddocks, Rina Srabonian, Geoff Sutcliffe, and Andrei Voronkov.

Finally, we would like to thank all authors for submitting their work to IJCAR 2012: this resulted in what we believe was an exciting technical program.

May 2012

Bernhard Gramlich

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