Lecture Notes in Artificial Intelligence 10395

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Preface

This volume contains the papers presented at the 26th International Conference on Automated Deduction (CADE 26), held between August 6 and August 11, 2017 in Gothenburg, Sweden. CADE is the major forum for the presentation of research in all aspects of automated deduction.

The Program Committee decided to accept 26 regular papers and 5 system descriptions from a total of 69 submissions. Each submission was reviewed by at least 3 Program Committee members and external reviewers. We would like to thank all the members of the Program Committee for their careful and thoughtful deliberations. Many thanks to Andrei Voronkov for providing the EasyChair system greatly facilitated the reviewing process, the electronic Program Committee meeting, and the preparation of the proceedings. In addition to the contributed papers, the program included three invited lectures by Philippa Gardner, Grant Passmore, and June Andronick. We thank the invited speakers not only for their presentations, but also for contributing full papers to the proceedings.

In addition, a diverse range of affiliated events took place. Five workshops:

- ARCADE: Automated Reasoning: Challenges, Applications, Directions, Exemplary Achievements
- PCR 2017: Workshop on Parallel Constraint Reasoning
- ThEdu 2017: Theorem Prover Components for Educational Software
- HCVS: Horn Clauses for Verification and Synthesis
- Vampire 2017: The 4th Vampire Workshop

One tutorial:

- Certified Functional (Co)programming with Isabelle/HOL

The CADE ATP System Competition (CASC) was also held. All this help to make the conference a success.

During the conference, the Herbrand Award for Distinguished Contributions to Automated Reasoning was presented to Lawrence Paulson for his pioneering contributions to automation in proof assistants and the foundations of formal security protocol verification as well as his impressive formalizations of deep mathematical theories. The Selection Committee for the Herbrand Award consisted of the CADE 26 Program Committee members, the trustees of CADE Inc., and the Herbrand Award winners of the last ten years. The Herbrand Award ceremony and the acceptance speech by Lawrence Paulson were part of the conference program.

Many people helped to make CADE 26 a success. We are very grateful to Wolfgang Ahrendt and Moa Johansson (CADE general chairs), Magnus Myreen (publicity chair) and Anneli Andersson for the tremendous effort they devoted to the organization of the
conference. We also like to thank Philipp Ruemmer (workshop chair), all the individual workshop organizers, and tutorial speakers. Last but not least, we thank all authors who submitted papers to CADE 26 and all conference participants.

June 2017

Leonardo de Moura
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