Preface

This volume contains the papers presented at the 28th Australasian Joint Conference on Artificial Intelligence 2015 (AI 2015), which was held in Canberra, Australia, November 30 to December 4, 2015. The conference is the premier event for artificial intelligence in Australasia and provides a forum for researchers and practitioners across all subfields of artificial intelligence to meet and discuss recent advances. AI 2015 took place at the QT Canberra hotel in the heart of Canberra, Australia's capital. The venue provided a stimulating environment for the discussion of a broad range of aspects of artificial intelligence. This year we were co-located with the Logic Summer School and also with ACRA 2015, the Australasian Conference on Robotics and Automation, with which we shared a joint session, a joint workshop, and a social event.

The technical program of AI 2015 comprised a number of high-quality papers that were selected in a thorough, double-blind reviewing process with at least three expert reviews per paper. Out of 102 submissions, our senior Program Committee with the help of an experienced international Program Committee selected 39 long papers and 18 short papers for presentation at the conference and inclusion in these proceedings. Papers were submitted by authors from 21 countries from five continents, demonstrating the broad international appeal of our conference. In addition to the 57 paper presentations, we had three keynote talks by high-profile speakers:

– Wolfram Burgard, Albert Ludwigs University Freiburg, Germany
– Kate Smith-Miles, Monash University, Australia
– Toby Walsh, NICTA and UNSW Sydney, Australia

AI 2015 also featured an exciting selection of workshops and tutorials that were free for all conference participants to attend. The two workshops were:

– AI-15 Workshop on Deep Learning and its Applications in Vision and Robotics, organised by Juxi Leitner (QUT), Anoop Cherian (ANU), and Sareh Shirazi (QUT)
– KR Conventicle 2015 in the memory of Norman Foo (1943 – 2015)

The four tutorials were on:

– Deep Learning by Lizhen Qu
– Fundamentals of Computational Social Choice, by Haris Aziz and Nicholas Mattei
– Mathematical Optimization in Supply Chain Logistics, by Thomas Kalinowski
– A Data Analytics View of Genomics, by Cheng Soon Ong

The conference was complemented by a student symposium as well as a social program that included a conference dinner at the National Museum of Australia.

A large number of people and organizations helped make AI 2015 a success. First and foremost, we would like to thank the authors for contributing and presenting their latest work at the conference. Without their contribution this conference would not have been possible. The same is true for the members of the conference organization.

Our special thanks go to our general chairs, Michael Maher and Sylvie Thiebaux, the local organization chairs, Kathryn Merrick and Sameer Alam, the other members of the conference organization, George Leu, Stephen Gould, Nina Narodytska, Carleton Coffrin, and Jiangjun Tang, as well as our student volunteers. We also thank the 18 members of our senior Program Committee, the members of our Program Committee, as well as additional reviewers who were all very dedicated and timely in their contributions to selecting the best papers for presentation at AI 2015.

We are grateful for support and sponsorship by the *Artificial Intelligence* journal, the College of Engineering and Computer Science of the Australian National University, UNSW Canberra, NICTA, AAAI, the Australian Computer Society, to Appazure (who built a free conference app for us to be used during the conference), and also the free conference management system EasyChair, which was used for putting together this volume. Last but not the least, we thank Springer for their sponsorship and their support in preparing and publishing this volume in the *Lecture Notes in Computer Science Series*.

September 2015   Bernhard Pfahringer
                                                                           Jochen Renz