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Preface

We are pleased to present this LNCS volume, the Proceedings of the 22nd Australasian Joint Conference on Artificial Intelligence (AI 2009), held in Melbourne, Australia, December 1–4, 2009. This long established annual regional conference is a forum both for the presentation of research advances in artificial intelligence and for scientific interchange amongst researchers and practitioners in the field of artificial intelligence. Conference attendees were also able to enjoy AI 2009 being co-located with the Australasian Data Mining Conference (AusDM 2009) and the 4th Australian Conference on Artificial Life (ACAL 2009).

This year AI 2009 received 174 submissions, from authors of 30 different countries. After an extensive peer review process where each submitted paper was rigorously reviewed by at least 2 (and in most cases 3) independent reviewers, the best 68 papers were selected by the senior Program Committee for oral presentation at the conference and included in this volume, resulting in an acceptance rate of 39%. The papers included in this volume cover a wide range of topics in artificial intelligence: from machine learning to natural language systems, from knowledge representation to soft computing, from theoretical issues to real-world applications.

AI 2009 also included 11 tutorials, available through the First Australian Computational Intelligence Summer School (ACISS 2009). These tutorials – some introductory, some advanced – covered a wide range of research topics within artificial intelligence, including data mining, games, evolutionary computation, swarm optimization, intelligent agents, Bayesian and belief networks. There were also four workshops run as part of AI 2009: the 5th Australasian Ontology Workshop (AOW), the Australasian Workshop on Computational Creativity, and the International Workshop on Collaborative Agents – REsearch and Development (CARE), and the First International Workshop on Fictional Prototyping as a Design Tool for Intelligent Environments (FPIE). These tutorials and workshops together provided an excellent start to the week.

The conference featured four distinguished keynote speakers, Ian Witten (University of Waikato, New Zealand), Mark Bedau (Reed College, USA), Eamonn Keogh (University of California - Riverside, USA), and Andries P. Engelbrecht (University of Pretoria, South Africa). Their talks were well received by the attendees.

As with all conferences, the success of AI 2009 depended on its authors, reviewers and organizers. We are very grateful to all the authors for their paper submissions, to all the reviewers for their outstanding work in refereeing the papers within a very tight schedule, and to the senior Program Committee members for their assistance in the paper selection process.

AI 2009 was organized by Clayton School of Information Technology, Monash University, which provided generous financial and organizational support. In

particular, we want to thank the conference General Chairs, Dammina Alahakoon and Xinghuo Yu, Advisory Committee Chair, Geoff Webb, Finance Chair, David Albrecht, Workshop Chair, Christian Guttman, and Publicity Chair, Junbin Gao, for their dedicated efforts that made AI 2009 such a success. We are grateful to the conference coordinator Dianne Nguyen who played such a critical role in managing the conference. Last but not least, AI 2009 relied heavily upon a team of volunteers to keep the conference running smoothly. They were the true heroes working behind the scenes. We are most grateful for their great efforts and contributions.

We would also like to thank our sponsors for their support and financial assistance, including the Centre for Research in Intelligent Systems (CRIS), Monash University, and Platform Technologies Research Institute (PTRI), RMIT University.

September 2009

Ann Nicholson
Xiaodong Li

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