Advanced Topics in Artificial Intelligence

12th Australian Joint Conference on Artificial Intelligence, AI'99, Sydney, Australia, December 6-10, 1999, Proceedings

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Preface

The 12th Australian Joint Conference on Artificial Intelligence (AI’99) held in Sydney, Australia, 6-10 December 1999, is the latest in a series of annual regional meetings at which advances in artificial intelligence are reported. This series now attracts many international papers, and indeed the constitution of the program committee reflects this geographical diversity. Besides the usual tutorials and workshops, this year the conference included a companion symposium at which papers on industrial applications were presented. The symposium papers have been published in a separate volume edited by Eric Tsui. AI’99 is organized by the University of New South Wales, and sponsored by the Australian Computer Society, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Computer Sciences Corporation, the KRRU group at Griffith University, the Australian Artificial Intelligence Institute, and NeuronWorks Ltd.

AI’99 received over 120 conference paper submissions, of which about one-third were from outside Australia. From these, 39 were accepted for regular presentation, and a further 15 for poster display. These proceedings contain the full regular papers and extended summaries of the poster papers. All papers were refereed, mostly by two or three reviewers selected by members of the program committee, and a list of these reviewers appears later.

The technical program comprised two days of workshops and tutorials, followed by three days of conference and symposium plenary and paper sessions. Distinguished plenary speakers were invited to share their experience and expertise in AI with our delegates. Some workshops (Knowledge Acquisition, Commonsense Reasoning, AI Applications to Plant and Animal Production) also had their own invited speakers.

The plenary speakers were: Paul Beinat (NeuronWorks), Ussama Fayed (Microsoft Research), Michael Georgeff (Australian Artificial Intelligence Institute), Hiroshi Motoda (Osaka University), and Eugene C. Freuder (University of New Hampshire). The workshop speakers were: Takahira Yamaguchi (Shizuoka University) in Knowledge Acquisition, John McCarthy (Stanford University) and Michael Thielscher (Dresden University) in Commonsense Reasoning, and M.H. Rasmy (University of Cairo) in AI Applications in Plant and Animal Production. We thank our sponsors and the workshop organizers for supporting their visit.

The smooth running of AI’99 was largely due to its program committee, the administrative staff, the reviewers, the conference organizers CIM Pty Ltd, and the managers of the venue Coogee Holiday Inn.

We thank Springer-Verlag and its representative Alfred Hofmann for efficient assistance in producing these proceedings of AI’99 as a volume in Lecture Notes in Artificial Intelligence series.

October 1999

Norman Foo
the Conference Chair
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