Lecture Notes in Artificial Intelligence 3157

Edited by J. G. Carbonell and J. Siekmann

Subseries of Lecture Notes in Computer Science

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PRICAI 2004: Trends in Artificial Intelligence

8th Pacific Rim International Conference on Artificial Intelligence Auckland, New Zealand, August 9-13, 2004 Proceedings



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Library of Congress Control Number: 2004109779

CR Subject Classification (1998): I.2, F.1

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ISSN 0302-9743 ISBN 3-540-22817-9 Springer Berlin Heidelberg New York

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Typesetting: Camera-ready by author, data conversion by Olgun Computergrafik Printed on acid-free paper SPIN: 11308799 06/3142 5 4 3 2 1 0

Preface

The Pacific Rim International Conference on Artificial Intelligence (PRICAI) is a biennial international event which focuses on Artificial Intelligence (AI) theories and technologies, and their applications which are of social and economic importance for countries in the Pacific Rim region. Seven earlier conferences were held in: Nagoya, Japan (1990); Seoul, Korea (1992); Beijing, China (1994); Cairns, Australia (1996); Singapore (1998); Melbourne, Australia (2000); and Tokyo, Japan (2002). PRICAI 2004 was the eigth in the series and was held in Auckland, New Zealand in August 2004.

PRICAI 2004 had attracted a historical record number of submissions, a total of 356 papers. After careful reviews by at least two international Program Committee members or referees, 94 papers were accepted as full papers (27%) and 54 papers (15%) were accepted as posters. Authors of accepted papers came from 27 countries. This volume of the proceedings contains all the 94 full papers but only a 2-page extended abstract of each of the accepted posters. The full papers were categorized into four sections, namely: AI foundations, computational intelligence, AI technologies and systems, and AI specific application areas. Among the papers submitted, we found "Agent Technology" to be the area having the most papers submitted. This was followed by "Evolutionary Computing", "Computational Learning", and "Image Processing".

Many people contributed towards the production of this proceedings. First, we would like to thank the Program Committee members and referees for their extremely hard work and timely return of their comprehensive reports. Without them, it would have been impossible to make decisions and to produce such a high-quality proceedings on time. Second, we would like to acknowledge the contributions of all the authors of the 356 papers submitted. Without their willingness to submit their work to us, there would be no PRICAI.

The technical programs comprised two days of workshops and tutorials, and three days of technical sessions, invited talks and keynote speeches. Proceedings for each workshop and tutorial will be published separately. The three renowned keynote speakers were Prof. Richard Lethrop (University of California, Irvine), Dr. Mehran Sahami (Google, Inc. and Stanford University), and Prof. Carles Sierra (AI Research Institute, Spain). No doubt, their talks will inspire many of our researchers in the Pacific Rim region. We thanked them sincerely for their willingness to come and share their work among us.

Finally, we would like to thank our financial sponsors: AUT, Air Force Office of Scientific Research, Asian Office of Aerospace Research and Development, the University of Auckland, and Franz Inc. for their generosity and willingness to be a part of this wonderful conference. We would also like to thank Saidé Lo, Dr. Vladimir Obolonkin and Kitty Ko at AUT for their endless efforts in organizing the conference.

August 2004 Auckland Chengqi Zhang Hans W. Guesgen Wai K. Yeap

Organization

PRICAI 2004 was organized by the Institute for Information Technology Research, Auckland University of Technology, New Zealand. The conference was held at the Sheraton Hotel, Auckland from 9th August to 13th August, 2004.

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