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Preface

The International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems (IEA/AIE), always sponsored by the International Society of Applied Intelligence (ISAI), emphasizes applications of applied intelligent systems to solve real-life problems in all areas. It is held every year and has become one of the biggest and most important academic activities concerning the theory and applications of intelligent systems in the world. The IEA/AIE 2009 conference was hosted by the National University of Tainan and National University of Kaohsiung in Taiwan. This was the first time that the IEA/AIE conference was held in Taiwan.

We received 286 papers from all parts of the world. Only 84 papers were selected for publication in this volume of LNAI proceedings. Each paper was reviewed by at least two anonymous referees to assure the high quality. We would like to express our sincere thanks to the Program Committee members and all the reviewers for their hard work, which helped us to select the highest quality papers for the conference. These papers highlight opportunities and challenges for the next generation of applied intelligence and reveal technological innovations in real applications.

The papers in the proceedings cover the following topics: autonomous agents, computer vision, data mining and knowledge discovery, decision support systems, evolutionary computation, fuzzy logic and uncertainty, intelligent system applications, intelligent wireless computing, knowledge management and natural language processing, machine learning, multi-agent systems, and neural networks, as well as three special invited topics including engineering knowledge and semantic systems, mass customization of manufacturing products using applied intelligent systems, and mining interesting knowledge.

In addition to paper presentations, the conference invited five internationally famous scholars to give splendid keynote speeches. They were Hisao Ishibuchi from Osaka Prefecture University, Japan, Xin Yao from University of Birmingham, UK, Ngoc Thanh Nguyen from Wroclaw University of Technology, Poland, Wen-Lian Hsu from Academia Sinica, Taiwan, and Pau-Choo Chung from National Cheng Kung University, Taiwan.

We would like to thank our main sponsors, ISAI, as well as our other sponsors: Association for the Advancement of Artificial Intelligence (AAAI), Association for Computing Machinery (ACM/SIGART), Canadian Society for the Computational Studies of Intelligence (CSCSI/SCEIO), European Neural Network Society (ENNS), International Neural Network Society (INNS), Japanese Society for Artificial Intelligence (JSAI), The Society for Korean Institute of Intelligent Systems (KIIS), Taiwanese Association for Artificial Intelligence (TAAI), and Texas State University-San Marcos.

We wish to thank the National Science Council of Taiwan, R.O.C., the Ministry of Education of Taiwan, R.O.C., the Ministry of Economic Affairs of Taiwan, R.O.C., the National University of Tainan, the National University of Kaohsiung, the Tainan City Government, and the other academic sponsors for their financial and logistical support.

We would also like to thank the Special Session Chairs, Chao-Lin Liu and Ying Liu, and the special session organizers for their assistance in the special session invitation. We would like to thank Springer for their help in publishing the proceedings. Moreover, grateful appreciation is expressed to all the Organizing Committee members and the local staff, especially Chih-Chin Lai, Hsin-Chang Yang, Rong-Ming Chen, Tsung-Yen Chuang, Jiann-Shu Lee, Ming-Yi Ju and Mang-Chun Wang for their help. Without their efforts, this conference would not have been such a substantial achievement.

Finally, we cordially thank the other participants, as well as all the authors, who made important contributions to the organization of this conference. The conference would not have been possible without their valuable support.

March 2009

Been-Chian Chien
Tzung-Pei Hong
Shyi-Ming Chen
Moonis Ali

Organization

IEA/AIE 2009 was organized by the International Society of Applied Intelligence, the National University of Tainan, and the National University of Kaohsiung in cooperation with AAAI, ACM/SIGART, CSCSI/SCEIO, ENNS, INNS, JSAI, KIIS, TAAI and Texas State University-San Marcos.

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