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With Aspects of Artificial Intelligence

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Preface

The International Conference on Intelligent Computing (ICIC) was formed to provide an annual forum dedicated to the emerging and challenging topics in artificial intelligence, machine learning, pattern recognition, image processing, bioinformatics, and computational biology. It aims to bring together researchers and practitioners from both academia and industry to share ideas, problems, and solutions related to the multifaceted aspects of intelligent computing.

ICIC 2010, held in Changsha, China, August 18–21, 2010, constituted the 6th International Conference on Intelligent Computing. It built upon the success of ICIC 2009, ICIC 2008, ICIC 2007, ICIC 2006, and ICIC 2005, that were held in Ulsan, Korea, Shanghai, Qingdao, Kunming, and Hefei, China, respectively.

This year, the conference concentrated mainly on the theories and methodologies as well as the emerging applications of intelligent computing. Its aim was to unify the picture of contemporary intelligent computing techniques as an integral concept that highlights the trends in advanced computational intelligence and bridges theoretical research with applications. Therefore, the theme for this conference was "Advanced Intelligent Computing Technology and Applications." Papers focusing on this theme were solicited, addressing theories, methodologies, and applications in science and technology.

ICIC 2010 received 926 submissions from 29 countries and regions. All papers went through a rigorous peer-review procedure and each paper received at least three review reports. Based on the review reports, the Program Committee finally selected 253 high-quality papers for presentation at ICIC 2010, of which 243 papers are included in three volumes of proceedings published by Springer: one volume of *Lecture Notes in Computer Science* (LNCS), one volume of *Lecture Notes in Artificial Intelligence* (LNAI), and one volume of *Communications in Computer and Information Science* (CCIS). The other 10 papers will be included in *Neural Computing & Applications*.

This volume of *Lecture Notes in Artificial Intelligence* (LNAI) includes 85 papers.

The organizers of ICIC 2010, including Hunan University, Institute of Intelligent Machines of Chinese Academy of Sciences, made an enormous effort to ensure the success of ICIC 2010. We hereby would like to thank the members of the Program Committee and the referees for their collective effort in reviewing and soliciting the papers. We would like to thank Alfred Hofmann from Springer for his frank and helpful advice and guidance throughout and for his continuous support in publishing the proceedings. In particular, we would like to thank all the authors for contributing their papers. Without the high-quality submissions from the authors, the success of the conference would not have been possible. Finally, we are especially grateful to the IEEE Computational Intelligence Society, the International Neural Network Society, and the National Science Foundation of China for their sponsorship.

June 2010

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