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Volume Editors

Licheng Jiao
Xidian University, Xi'an 710071, China
E-mail: lchjiao@mail.xidian.edu.cn

Lipo Wang
Nanyang Technological University, Singapore
E-mail: elpwang@ntu.edu.sg

Xinbo Gao
Xidian University, Xi'an, 710071 China
E-mail: xbgao@mail.xidian.edu.cn

Jing Liu
Xidian University, Xi'an, 710071, China
E-mail: neouma@mail.xidian.edu.cn

Feng Wu
Microsoft Research Asia, Haidian, 100080 Beijing, China
E-mail: fengwu@microsoft.com

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Preface

This book and its sister volumes, i.e., LNCS volumes 4221 and 4222, constitute the proceedings of the 2nd International Conference on Natural Computation (ICNC 2006), jointly held with the 3rd International Conference on Fuzzy Systems and Knowledge Discovery (FSKD 2006, LNAI volume 4223) on 24-28 September 2006 in Xi'an, Shaanxi, China. In its budding run, ICNC 2006 successfully attracted 1915 submissions from 35 countries/regions (the joint ICNC-FSKD 2006 event received 3189 submissions). After rigorous reviews, 254 high-quality papers, i.e., 168 long papers and 86 short papers, were included in the ICNC 2006 proceedings, representing an acceptance rate of 13.3%.

ICNC-FSKD 2006 featured the most up-to-date research results in computational algorithms inspired from nature, including biological, ecological, and physical systems. It is an exciting and emerging interdisciplinary area in which a wide range of techniques and methods are being studied for dealing with large, complex, and dynamic problems. The joint conferences also promoted cross-fertilization over these exciting and yet closely-related areas, which had a significant impact on the advancement of these important technologies. Specific areas included neural computation, quantum computation, evolutionary computation, DNA computation, fuzzy computation, granular computation, artificial life, etc., with innovative applications to knowledge discovery, finance, operations research, and more. In addition to the large number of submitted papers, we were blessed with the presence of six renowned keynote speakers.

On behalf of the Organizing Committee, we thank Xidian University for sponsorship, and the National Natural Science Foundation of China, the International Neural Network Society, the Asia-Pacific Neural Network Assembly, the IEEE Circuits and Systems Society, the IEEE Computational Intelligence Society, the IEEE Computational Intelligence Singapore Chapter, and the Chinese Association for Artificial Intelligence for technical co-sponsorship. We thank the members of the Organizing Committee, the Advisory Board, and the Program Committee for their hard work in the past 12 months. We wish to express our heartfelt appreciation to the keynote speakers, session chairs, reviewers, and student helpers. Our special thanks go to the publisher, Springer, for publishing the ICNC 2006 proceedings as two volumes of the Lecture Notes in Computer Science series (and the FSKD 2006 proceedings as one volume of the Lecture Notes in Artificial Intelligence series). Finally, we thank all the authors and participants for their great contributions that made this conference possible and all the hard work worthwhile.

September 2006

Lipo Wang
Licheng Jiao

Organization

ICNC 2006 was organized by Xidian University and technically co-sponsored by the National Natural Science Foundation of China, the International Neural Network Society, the Asia-Pacific Neural Network Assembly, the IEEE Circuits and Systems Society, the IEEE Computational Intelligence Society, the IEEE Computational Intelligence Singapore Chapter, and the Chinese Association for Artificial Intelligence.

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