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# Advances in Computation and Intelligence

Second International Symposium, ISICA 2007  
Wuhan, China, September 21-23, 2007  
Proceedings

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# Preface

We are proud to introduce the proceedings of the 2nd International Symposium on Intelligence Computation and Applications (ISICA 2007) held in China University of Geosciences (Wuhan), China, September 21–23, 2007. ISICA 2007 successfully attracted nearly 1000 submissions. After rigorous reviews, 71 high-quality papers were included in the proceedings of ISICA 2007.

The 1st International Symposium on Intelligence Computation and Applications (ISICA 2005) held in Wuhan, April 4–6, 2005 was organized by the School of Computer Science, China University of Geosciences. It was a great success with over 100 participants, including a number of invited speakers. The proceedings of ISICA 2005 have a number of special features including uniqueness, newness, successfulness, and broadness. The proceedings of ISICA 2005 have also been accepted in the Index to Scientific and Technical Proceedings.

Following the success of ISICA 2005, ISICA 2007 focused on research on computational intelligence in analyzing and processing massive real-time data. ISICA 2007 featured the most up-to-date research on multiobjective evolutionary optimization, evolutionary algorithms and operators, evolutionary optimization, evolutionary learning, neural networks, ant colony and artificial immune systems, particle swarm optimization, pattern recognition, data mining, intelligent systems, and evolutionary design. ISICA 2007 also provided a venue to foster technical exchanges, renew everlasting friendships, and establish new connections.

On behalf of the Organizing Committee, we would like to thank warmly the sponsors, China University of Geosciences and Chinese Society of Astronautics, who helped in one way or another to achieve our goals for the conference. We express our appreciation to Springer, for publishing the proceedings of ISICA 2007. We would also like to thank the authors for submitting their research work, as well as the Program Committee members and reviewers for their enthusiasm, time, and expertise.

The invaluable help of active members from the Organizing Committee, including Qiuming Zhang, Siqing Xue, Ziyi Chen, Yan Guo, Xuesong Yan, Xiang Li, Guang Chen, Rui Wang, Hui Wang, Hui Shi, Tao Hu, Zhenhua Cai, and Gang Liu, in setting up and maintaining the online submission systems, assigning the papers to the reviewers, and preparing the camera-ready version of the proceedings was highly appreciated and we would like to thank them personally for their efforts to make ISICA 2007 a success.

We wish to express our gratitude to Alfred Hofmann, the Executive Editor, Computer Science Editorial, Springer-Verlag, for his great support of the

conference. We also wish to acknowledge the dedication and commitment of the LNCS editorial staff.

September 2007

Lishan Kang  
Yong Liu  
Sanyou Zeng

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ISICA 2007 was organized by the School of Computer Science and Research Center for Space Science and Technology, China University of Geosciences, and sponsored by China University of Geosciences and Chinese Society of Astronautics.

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