SPECIAL ISSUE ON COMPUTATIONAL INTELLIGENCE AND INDUSTRIAL APPLICATIONS

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The Third International Symposium on Computational Intelligence and Industrial Applications (ISCIIA2008) was held in Dali, Yunnan Province, China, November 21 - 26, 2008. ISCIIA is a biennial symposium, which focuses on advanced technologies for soft computing, computational intelligence and real-world applications. The first ISCIIA was held in Haikou, China, 2004, and the second ISCIIA was held in Guangzhou, China, 2006, while the 4th ISCIIA will be held in Harbin, China, August 2010.

ISCIIA2008 received a great number of submissions, and all of them were carefully reviewed by ISCIIA2008 international program committee, while only 58 papers were accepted for publication in the ISCIIA2008 proceedings. Besides three plenary talks, ISCIIA2008 covered the following wide varieties of topics: Neural Networks, Fuzzy Systems, Evolutionary Computing, Advanced Control Theories, Image Processing and Visualization, Intelligent Data Analysis, Computer Technologies, Forecast Estimation, Data Mining, Robotics and Mechatronics, Intelligent Management Systems, and Applications.

For this Special Issue on Computational Intelligence and Industrial Applications for ISCIIA2008 in International Journal of Innovative Computing, Information and Control (IJICIC), 10 submissions were selected from the above contributed papers. After peer reviews, only 5 papers have been accepted for publication, which are on energy saving and consumption reduction of process industry based on extension theory; extracting traffic parameters based on image processing; multi-label classification based on SVM with delicate decision boundary; reinforcement learning for dynamic object manipulation in noisy environment; and control system design of inserting machine and its high precision alignment.

I hope this special issue will be a helpful reference for people working in the areas of computational intelligence and industrial applications, and look forward to new advances in computational intelligence technologies and much more industrial applications. I would like to express my sincere thanks to all contributors and reviewers for their great effort to make the special issue possible, and also my gratefulness to Professor Yan Shi, Executive Editor of IJICIC, for his advice and encouragement during this process, and hosting this special issue.

¹Co-Chair of the Program Committee of ISCIIA2008.