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## Foreword

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**Biographical notes:** Chuan-Yu Chang received his MS in Electrical Engineering from National Taiwan Ocean University, Keelung, Taiwan, in 1995 and PhD in Electrical Engineering from National Cheng Kung University, Tainan, Taiwan, in 2000. Since 2003 he has been with the Institute of Computer Science and Information Engineering, National Yunlin University of Science & Technology, where he is currently an Associate Professor. His current research interests include neural networks and their applications to medical image processing, wafer defect inspection and face recognition. In the above areas, he has over 100 publications in journals and conference proceedings.

Wing-Kwong Wong is an Associate Professor and a former Head of the Department of Electronic Engineering in the National Yunlin University of Science and Technology. He received his BS in Computer Science with distinction from the University of Toronto 1983, MS and PhD in Computer Science from the University of Texas at Austin in 1986 and 1992 respectively. He received research awards from the National Science Council in Taiwan for five times and participated in the Program for Promoting Academic Excellence of Universities in e-learning from 2000 to 2004. His research interests include artificial intelligence, computer-assisted learning, robotics, embedded systems and computational design.

Yin-Fu Huang received his BS in Computer Science from National Chiao-Tung University in 1979 and his MS and PhD in Computer Science from National Tsing-Hua University in 1984 and 1988, respectively. He is currently a Professor in the Department of Computer Science and Information Engineering, National Yunlin University of Science and Technology. Between July 1988 and July 1992, he was with Chung Shan Institute of Science and Technology as an Assistant Researcher. His research interests include database systems, multimedia systems, data mining, mobile computing and bioinformatics.

Shyi-Ming Chen received his PhD from the Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan, in June 1991. He is currently a Professor in the Department of Computer Science and Information Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan. He has published more than 320 papers in referred journals, book chapters and conference proceedings. Since August 2007, he also has been the Dean of the College of Electrical Engineering and Computer Science, Jinwen University of Science and Technology, Taipei County, Taiwan. His research interests include fuzzy systems, information retrieval, knowledge-based systems, artificial intelligence, neural networks, data mining and genetic algorithms.

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Artificial intelligence (AI) is an important technology. The objective of the AI fields is the creation of machines that can ‘think’. AI has a wide spectrum of applications including machine learning, control, planning and scheduling, expert system, handwriting, natural language, speech facial recognition, etc. The study of AI has become an engineering discipline, focused on providing solutions to real life problems, knowledge mining, software applications, strategy games like computer chess, other video games, etc.

The TAAI 2007 conference (*The 12th Conference on Artificial Intelligence and Application*) was held on 16–17 November 2007 at National Yunlin University of Science and Technology, Yunlin, Taiwan, which was supported by the Taiwanese Association for Artificial Intelligence (TAAI). It was a high quality conference, which provided a platform to bring together researchers and developers to exchange new ideas and the latest achievements in the field of artificial intelligence. There were 201 papers accepted in the TAAI 2007 and more than 80 program committee members and more than 100 reviewers reviewed these papers. All papers were reviewed by at least two reviewers.

According to the reviewers’ comments and recommendations, the authors of seven qualified papers were invited to prepare their extended versions for a further review from different reviewers. After a lengthy and strict review process, only five papers were selected as the ones published on ‘Special issue on applications of intelligent systems’ in the *International Journal of Intelligent Information and Database Systems (IJIDS)*.

On behalf of guest editors, we would like to express our gratitude to Professor Ngoc Thanh Nguyen, the Editor-in-Chief of *IJIDS* for offering this special issue. Most importantly, we thank all the authors, reviewers, organisers and sponsors of the TAAI 2007, for their contributions and assistance to make this a success.