Computational Collective Intelligence

Technologies and Applications

Second International Conference, ICCCI 2010
Kaohsiung, Taiwan, November 10-12, 2010
Proceedings, Part III
Preface

This volume composes the proceedings of the Second International Conference on Computational Collective Intelligence—Technologies and Applications (ICCCI 2010), which was hosted by National Kaohsiung University of Applied Sciences and Wroclaw University of Technology, and was held in Kaohsiung City on November 10-12, 2010. ICCCI 2010 was technically co-sponsored by Shenzhen Graduate School of Harbin Institute of Technology, the Tainan Chapter of the IEEE Signal Processing Society, the Taiwan Association for Web Intelligence Consortium and the Taiwanese Association for Consumer Electronics. It aimed to bring together researchers, engineers and policymakers to discuss the related techniques, to exchange research ideas, and to make friends. ICCCI 2010 focused on the following themes:

- Agent Theory and Application
- Cognitive Modeling of Agent Systems
- Computational Collective Intelligence
- Computer Vision
- Computational Intelligence
- Hybrid Systems
- Intelligent Image Processing
- Information Hiding
- Machine Learning
- Social Networks
- Web Intelligence and Interaction

Around 500 papers were submitted to ICCCI 2010 and each paper was reviewed by at least two referees. The referees were from universities and industrial organizations. 155 papers were accepted for the final technical program. Four plenary talks were kindly offered by: Gary G. Yen (Oklahoma State University, USA), on “Population Control in Evolutionary Multi-objective Optimization Algorithm,” Chin-Chen Chang (Feng Chia University, Taiwan), on “Applying De-clustering Concept to Information Hiding,” Qinyu Zhang (Harbin Institute of Technology, China), on “Cognitive Radio Networks and Its Applications,” and Lakhmi C. Jain (University of South Australia, Australia), on “Intelligent System Design in Security.”

We would like to thank the authors for their tremendous contributions. We would also express our sincere appreciation to the reviewers, Program Committee members and the Local Committee members for making this conference successful. Finally,
we would like to express special thanks for the financial support from the National Kaohsiung University of Applied Sciences, Kaohsiung City Government, National Science Council and Education Ministry, Taiwan, in making ICCCI 2010 possible.

November 2010

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Shyi-Ming Chen
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**Keynote Speakers**

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Chia-Nan Wang National Kaohsiung University of Applied Sciences, Taiwan
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Chuan-Yu Chang, Shu-Han Chang, and Shao-Jer Chen

Automatic and Accurate Image Matting
Wu-Chih Hu, Deng-Yuan Huang, Ching-Yu Yang, Jia-Jie Jhu, and Cheng-Pin Lin

Improved DCT-Based Watermarking through Particle Swarm Optimization
Chih-Chin Lai, Wei-Shun Wang, and Ci-Fong Jhan

A New Adaptive B-spline VFC Snake for Object Contour Extraction
Hoang-Nam Nguyen and An-Chen Lee

Algorithm for Computational Measure of Color Constancy
S.J. Jerome Teng

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