



*International*



*The Fourth International Conference on  
Innovative Computing, Information and Control*

December 7-9, 2009, Kaohsiung, Taiwan  
<http://bit.kuas.edu.tw/~icic09>

*Conference Program*

**December 6, 2009**

**Registration ..... 13:30-17:30**  
**(Kaohsiung Ambassador Hotel)**

**December 7, 2009**

**Registration ..... 08:00-17:30**  
**Opening ..... 08:30-09:00**  
**Plenary Speech I (Prof. Hideyuki Takagi) ..... 09:00-10:00**  
**Coffee Break..... 10:00-10:10**  
**Plenary Speech II (Prof. Tzyh-Jong Tarn) ..... 10:10-11:10**  
**Coffee Break..... 11:10-11:20**  
**Plenary Speech III (Prof. John F Roddick.....11:20-12:20**  
**Lunch..... 12:20-13:20**  
**Sessions A01-A05 ..... 13:20-15:20**  
**Coffee Break..... 15:20-15:40**  
**Sessions A06-A10 ..... 15:40-17:40**  
**Welcome Dinner ..... 18:00-20:00**

**December 8, 2009**

**Registration ..... 08:00-17:30**  
**Plenary Speech IV (Prof. Andrew Ware) ..... 09:00-10:00**  
**Coffee Break..... 10:00-10:10**

<b>Plenary Speech V ( Prof. Jhing-Fa Wang )</b> .....	<b>10:10-11:10</b>
<b>Coffee Break</b> .....	<b>11:10-11:20</b>
<b>Sessions B01-B05</b> .....	<b>11:20-12:30</b>
<b>Lunch</b> .....	<b>12:30-13:20</b>
<b>Sessions B06-B10</b> .....	<b>13:20-15:20</b>
<b>Coffee Break</b> .....	<b>15:20-15:40</b>
<b>Sessions B11-B15</b> .....	<b>15:40-17:40</b>
<b>Conference Banquet</b> .....	<b>18:40-20:00</b>

**December 9, 2009**

<b>Registration</b> .....	<b>08:00-17:30</b>
<b>Plenary Speech VI ( Prof. Won Kim )</b> .....	<b>09:00-10:00</b>
<b>Coffee Break</b> .....	<b>10:00-10:10</b>
<b>Plenary Speech VII ( Prof. Jianrong Tan )</b> .....	<b>10:10-11:10</b>
<b>Coffee Break</b> .....	<b>11:10-11:20</b>
<b>Sessions C01-C05</b> .....	<b>11:20-12:30</b>
<b>Lunch</b> .....	<b>12:30-13:20</b>
<b>Sessions C06-C10</b> .....	<b>13:20-15:20</b>
<b>Coffee Break</b> .....	<b>15:20-15:40</b>
<b>Sessions C11-C14</b> .....	<b>15:40-17:40</b>
<b>Poster Session</b> .....	<b>15:40-17:40</b>
<b>Conference Farewell</b> .....	<b>18:00-20:00</b>

# Session List

## **December 7, 2009, 13:20-15:20**

- A01: Management of Technology
- A02: Innovative Computing and Its Applications
- A03: Information Networking and Application
- A04: Intelligent Measurement, Diagnosis and Control (I)
- A05: Human Information Technologies

## **December 7, 2009, 15:40-17:40**

- A06: e-Learning
- A07: Fault Diagnosis and Fault Tolerant Control
- A08: Innovative Embedded Computing
- A09: Intelligent Measurement, Diagnosis and Control (II)
- A10: Cross-discipline Techniques (I)

## **December 8, 2009, 11:20-12:30**

- B01: Cross-discipline Techniques (II)
- B02: Cross-discipline Techniques (III)
- B03: Cross-discipline Techniques (IV)
- B04: Cross-discipline Techniques (V)
- B05: Cross-discipline Techniques (VI)

## **December 8, 2009, 13:20-15:20**

- B06: Novel Approaches to Pervasive Applications
- B07: Advanced Image Recognition and Retrieval
- B08: Identification for Optimization in Nonlinear Systems
- B09: Computer Technologies for Intelligent Systems
- B10: Innovative Intelligent System and Control (I)

## **December 8, 2009, 15:40-17:40**

- B11: Recent Advances on Swarm Intelligence
- B12: Control system and Applications
- B13: RFIC for Wireless Control

B14: Intelligent Computing, 3D Model Retrieval, and Data Hiding

B15: Innovative Intelligent System and Control (II)

### **December 9, 2009, 11:20-12:30**

C01: Intellectual Systems and Interfaces (I)

C02: Motor Electronic and Control Applications (I)

C03: Innovative Applications of Data Mining and Knowledge Management

C04: Intelligent Systems and Applications

C05: Cross-discipline Techniques (VII)

### **December 9, 2009, 13:20-15:20**

C06: Intellectual Systems and Interfaces (II)

C07: Motor Electronic and Control Applications (II)

C08: Artificial Intelligence Applications for E-services

C09: Mathematical Modeling and Control Systems

C10: Natural Language Processing and Ontology Engineering

### **December 9, 2009, 15:40-17:40**

C11: E-commerce and Logistics Management

C12: Network Security and Network Algorithms

C13: Intelligent Video Processing

C14: Innovative Computing Methods in Finance and Management

C15: Poster Session

## **A01**

### ***Management of Technology***

Chia-Nan Wang, National Kaohsiung University of Applied Sciences, Taiwan

#### **A01-01, ICICIC-2009-IS01-01**

*The Relationship between Decision Type and Knowledge Management Preferences*

Peng-Hsiang Kao, Hsin Kao, and Ji-Chyuan Liou

China Institute of Technology, Taiwan

#### **A01-02, ICICIC-2009-IS01-02**

*The Relationship between Length of Employment and Length of Leadership – Moderating Effects of Knowledge Management Preferences*

Hsin Kao, Peng-Hsiang Kao, and Ji-Chyuan Liou

China Institute of Technology, Taiwan

#### **A01-03, ICICIC-2009-IS01-03**

*The Empirical Study on the Vitality Index of Organization for the Taiwanese Hospitality*

Hsiao-Chi Ling, Chia-Nam Wang, Sung-Yi Hsieh, and Chao Chiao

Ching Kuo Institute of Management and Health, Taiwan

#### **A01-04, ICICIC-2009-IS01-04**

*Study of Bike Customers Value Analysis*

Ming-Haur Shih

National Sun Yat-Sen University, Taiwan

#### **A01-05, ICICIC-2009-IS01-05**

*The Evaluation of an Index to Measure the Sustainable Vitality of Financial Industry*

Sung-Yi Hsieh, Chia-Nam Wang, Hsiao-Chi Ling, and Chao Chiao

De Lin Institute of Technology, Taiwan

#### **A01-06, ICICIC-2009-IS01-06**

*Case Adaptation in Case-Based Reasoning System for Back-Light Modules*

Chengter Ho and Lifai Wang

National Kaohsiung University of Applied Science, Taiwan

#### **A01-07, ICICIC-2009-IS01-07**

*A Discourse on Variables Affecting Grinding Spark Duration of Billets —Using 1018 Steel B5*

*Process of Certain Steel Plant as Example*

Gwo-Yang Tsai and Ming-Hung Shu

National Kaohsiung University of Applied Science & China Steel Corporation, Taiwan

**A01-08, ICICIC-2009-IS01-09**

*Utilizing AHP in the Most Advantageous Bid*

Huo Sheng Kuo, Chao-Lieh Pan, and Ying-fang Huang

National Kaohsiung University of Applied Science, Taiwan

**A01-09, ICICIC-2009-1374**

*A Two-level Estimation Approach for a Radar System*

W-C Liu, C-W Lai, Y-N Chung, and T-S Pan

Da-Yeh University, Taiwan

## **A02**

### ***Innovative Computing and Its Applications***

Huey-Ming Lee, Chinese Culture University, Taiwan

Lily Lin, China University of Technology, Taiwan

#### **A02-01, ICICIC-2009-IS29-01**

*Fuzzy Inventory without Backorder Model Based on Signed Distance Method*

Lily Lin and Huey-Ming Lee

Department of Information Management

Chinese Culture University, Taiwan

#### **A02-03, ICICIC-2009-IS29-03**

*A New Method for Fuzzy Group Decision-Making Based on Fuzzy Induced OWA Operators*

Shyi-Ming Chen and Shun-Jhong Niou

National Taiwan University of Science and Technology, Taipei

#### **A02-04, ICICIC-2009-IS29-04**

*A Fuzzy Presumptive Rate of Aggregative Risk in Software Development*

Huey-Ming Lee and Lily Lin

Chinese Culture University, Taiwan

#### **A02-05, ICICIC-2009-IS29-05**

*Using Cross-Platform Course Management System in English Practicum Course: A Case Study for English Teacher-Candidates*

Karen C. C. Tsai

Chinese Culture University, Taiwan

#### **A02-06, ICICIC-2009-IS29-06**

*The Keyless Technique of Text Data Mining and Its Application*

Heng-Sheng Chen and Jaw-Sin Su

Chinese Culture University, Taiwan

#### **A02-07, ICICIC-2009-615**

*Face Recognition Under Varying Illumination Based On Ordinal Features*

Tao Sun, Yi Liu, and Huan Yang

Shandong University, China

#### **A02-08, ICICIC-2009-1027**

*Application of Non-Homogeneous Poisson Process Modeling to Containership Arrival Rate*

Hsien-Lun Wong, Shang-Hsing Hsieh, and Yi-Hsien Tu

Minghsin University of Science and Technology, Taiwan

**A02-09, ICICIC-2009-1647**

*Batch Process Optimal Design by a Mixed-Integer Evolutionary Algorithm*

Yung-Chien Lin, Yung-Chin Lin, and Kuo-Lan Su

WuFeng Institute of Technology, Taiwan

**A02-10, ICICIC-2009-IS29-02**

*Maximum Revenue for Fuzzy Price Based on  $(\lambda, 1)$  Interval-valued Fuzzy Numbers*

Teng-San Shih, Jin-Shieh Su, and Huey-Ming Lee

Chinese Culture University, Taiwan

## **A03**

### ***Information Networking and Application***

Takuo Nakashima, Tokai University, Japan

#### **A03-01, ICICIC-2009-IS19-03**

*A Proposal of Obstacle Detection Technology using the View-aid System*

Yoshifumi Oyama and Yusuke Nakashima

Kumamoto National College of Technology, Japan

#### **A03-02, ICICIC-2009-IS19-04**

*A New P2P File Sharing System Based on the Access Distribution Property*

Yuichi Hattori and Takuo Nakashima

Tokai University, Japan

#### **A03-03, ICICIC-2009-IS19-05**

*Flooding Features for the AODV Protocol under the Different Communication Distances*

Natsuru Yamamura and Takuo Nakashima

Tokai University, Japan

#### **A03-04, ICICIC-2009-404**

*A Debugging Algorithm in Equivalent Transformation Model using Oracle Rules*

Shinya Miyajima, Kiyoshi Akama, and Hiroshi Mabuchi

Gifu University, Japan

#### **A03-05, ICICIC-2009-767**

*Analytic Network Process Decision-making to Assess Collaborative Design Systems Organizational Performance*

Che-Wei Chang, Cheng-Ru Wu, and Chiu-Chin Chen

Yuanpei University, Taiwan

#### **A03-06, ICICIC-2009-1509**

*Application of Assembly Structure Model in Welding Estimate for Knowledge-based Production Design Support Systems*

Zhijia Zhang and Zhou Su

Sanyo Women's College, Japan

#### **A03-07, ICICIC-2009-1796**

*A Service-Aware Home Networking System Based on OSGi*

Chih-Yao Yang, Yu-Jen Chen, Hsu-Yang Kung, Chun-Hao Lin, and Shin-Di Li

Chang Gung University, Taiwan

**A03-09, ICICIC-2009-2015**

*A Temperature Surveillance System based on Zigbee Technology for Blaze Detection*

Mong-Fong Horng, Chien-Chou Shih, Wen-Hsiung Hsieh, and Li-Chen Lin

National Kaohsiung University of Applied Sciences, Taiwan

## **A04**

### ***Intelligent Measurement, Diagnosis and Control (I)***

Xiao-dong Zhang, Northwestern Polytechnical University, China

Lichen Gu, Northwestern Polytechnical University, China

Zhongsheng Wang, Northwestern Polytechnical University, China

### **A04-01, ICICIC-2009-IS09-01**

*Modeling of Aeroengine Hydro-mechanical Controller and Analyzing of the Control System Performance*

Yingqing Guo and Kuo Li

Southeast University, China

### **A04-02, ICICIC-2009-IS09-02**

*Application of Fuzzy Neural Network to Aero-engine Controller Design*

Haiquan Wang, Yingqing Guo, and Jun Lu

Southeast University, China

### **A04-03, ICICIC-2009-IS09-03**

*Design on Sampling Circuit of EEG Signal Based on AT86C2051 Single-chip*

Xiao-dong Zhang and Zhen-hai Zhang

Northwestern Polytechnical University, China

### **A04-04, ICICIC-2009-IS09-05**

*Investigation of a Novel Knowledge Operation Model Based on Rough Set Theory*

Rongzhen Zhao, Cuiming Li, and Chao Li

Lanzhou Univ, China

### **A04-05, ICICIC-2009-IS09-06**

*A Study on the Computer-Aided Dynamic Test and Analysis of the Rotating Accuracy of A Spindle*

Jiangping Wang and Zefu Bao

Xi'an Shiyou University, China

### **A04-06, ICICIC-2009-837**

*An Efficient Histogram-Based Method for Background Modeling*

Chung-Ming Kuo, Wei-Han Chang, Sheng-Bin Wang, and Chih-Shan Liu

I-Shou University, Taiwan

### **A04-07, ICICIC-2009-1819**

*Segmentation of Natural Image Based on Symmetry Features*

Shih-Kuan Liao, Yu-En Han, and Chuen-Horng Lin

National Taichung Institute of Technology, Taiwan

**A04-08, ICICIC-2009-2012**

*Research on Java Software Protection with the Obfuscation in Identifier Renaming*

Zhanyong Tang, Xiaojiang Chen, Dingyi Fang, and Feng Chen

Northwest University, China

## **A05**

### ***Human Information Technologies***

Tsuyoshi Ideguchi, Tokai University, Japan

#### **A05-01, ICICIC-2009-IS15-01**

*Basic Study on Presenting Distance Information to the Blind for Navigation*

Chikamune Wada

Kyushu Institute of Technology, Japan

#### **A05-02, ICICIC-2009-IS15-02**

*Implementation and Evaluation of the Gesture Interface for Object Based E-learning System*

Kazuo Nagata, Satoshi Dounoue, Kazuhiro Koshi, Masazumi Miyoshi, and Kimiyasu Kiyota  
Kumamoto National College of Technology, Japan

#### **A05-03, ICICIC-2009-IS15-03**

*Design of Comfortable Working Environment on Bed for Bedridden People*

Kazuhiro Koshi, Kazuo Nagata, Kimiyasu Kiyota, Masazumi Miyoshi, Hiroaki Koga, and  
Hitomi Umeda

Kumamoto National College of Technology, Japan

#### **A05-04, ICICIC-2009-IS15-04**

*An Examination of a Music Appreciation Method Incorporating Tactile Sensations from Artificial  
Vibrations*

Ryujiyu Yoshida, Tsuyoshi Ideguchi, and Keita Ooshima  
Tokai University, Japan

#### **A05-05, ICICIC-2009-745**

*Human Support Interface for Operation of Industrial Crane based on RNN*

Mitsuhiro Kimura, and Masami Konishi

Okayama University, Japan

#### **A05-06, ICICIC-2009-638**

*A network fle storage model with security and information retrieval support*

Wei-Heng Zhu and Shun Long

JiNan University, China

#### **A05-07, ICICIC-2009-774**

*HARDWARE REALIZATION OF TLM*

Yibin Li, Vassilios Chouliaras, and James Flint

Loughborough University, UK

**A05-08, ICICIC-2009-875**

*A Volume Visualization System with Augmented Reality Interaction for Evaluation of Radiotherapy Plans*

Chang-Yu Wang, Tsair-Fwu Lee, and Chun-Hsiung Fang

National Kaohsiung University of Applied Sciences, Taiwan

**A05-09, ICICIC-2009-1670**

*Using Volume Features and Shape Features for Alzheimer's Disease Diagnosis*

Jiann-Der Lee, Shau-Chiuan Su, and Chung-Hsien Huang, Wen-Chuin Xu, and You-You Wei

Chang Gung University, Taiwan

## **A06**

### ***e-Learning***

Min-Hsin Chen, Chienkuo Technology University, Taiwan

Chun-Hua Chen, Chienkuo Technology University, Taiwan

#### **A06-01, ICICIC-2009-IS30-01**

*The Development of an Effective RFID Instruction System*

Min-Hsin Chen, Rui-Chi Jao, Li-Hua Sui, and Yu-Shan Lin

National Central University, TAIWAN

#### **A06-02, ICICIC-2009-IS30-02**

*E-Learning: Creating a High Touch Learning Community with High Tech*

Pat LeMay Burr, Annette E. Craven, and Min-Hsin Chen

National Central University, TAIWAN

#### **A06-03, ICICIC-2009-IS30-03**

*A Chinese Idiomatic Phrase E-learning System*

Yih-Jeng Lin, Wen-Lung Tsai, and Tong-Sheng Lee

Chien-Kuo Technology University, Taiwan

#### **A06-04, ICICIC-2009-IS30-04**

*The Introduction and Future Visions of E-learning at Chienkuo Technology University*

Chun-Hua Chen and Min-Hsin Chen

National Central University, TAIWAN

#### **A06-05, ICICIC-2009-270**

*An Asymmetric and DCC Analysis of Two Exchange Rate Market Returns: An Evidence Study of the Japan and the Korea's Exchange Rate Markets*

Wann-Jyi Horng

Chia Nan University, Taiwan

#### **A06-06, ICICIC-2009-426**

*Computer Aided Diagnosis for Traditional Chinese Medicine based on Information Retrieval techniques*

Shun Long, and Wei-Heng Zhu

JiNan University, Guangzhou, China

#### **A06-07, ICICIC-2009-533**

*Local-Global-Learning of Naive Bayesian Classifier*

shengtong Zhong and Helge Langseth

Norwegian University of Science and Technology, Norway

**A06-08, ICICIC-2009-808**

*Quantitative Coronary Analysis Medical Image Processing Improved by Combining Wavelet Edge Detection and Segmentation*

Tsair-Fwu Lee, Chang-Yu Lee, Pei-Ju Chao, Chieh Lee, Chang-Yu Wang, and Chun-Hsiung Fang  
National Kaohsiung University of Applied Sciences, Taiwan

**A06-09, ICICIC-2009-1662**

*Building an interactive and collaborative learning system for virtual reality learning*

Hsiu-Mei Huang, Min-Cong Peng, and Yi-Chun Teng  
National Taichung Institute of Technology, Taiwan

**A07**

***Fault Diagnosis and Fault Tolerant Control***

Yuehjen Shao, Fu Jen Catholic University, Taiwan

**A07-01, ICICIC-2009-IS04-02**

*Fault Prediction for Dynamic Systems with State-Dependent Faults*

Gui-Bin Xu and Dong-Hua Zhou

Tsinghua University, China

**A07-02, ICICIC-2009-676**

*A Study on Applying Mind Mapping to Build a Knowledge Map of the Project Risk Management of Research and Development*

Yu-Tien Cheng, Huan-Ming Chuang, and Chan-Chao Wen

National Yunlin University of Science and Technology, Taiwan

**A07-03, ICICIC-2009-IS04-04**

*Fault-tolerant Sliding Mode Control Design for Near Space Vehicle Based on T-S Fuzzy Model*

Zhi-Feng Gao, Bin Jiang, Hua-Jun Gong, and Yu-Fei Xu

Nanjing University of Aeronautics and Astronautics, China

**A07-04, ICICIC-2009-IS04-05**

*Adaptive Control Algorithm for Speed Regulation of Marine Engine*

Xiao-Yan Xu and Yin-Zhong Ye

Shanghai Institute of Technology, China

**A07-05, ICICIC-2009-IS04-06**

*Stability of Master-slave Networked Control System*

Yingwei Zhang, Lirong Zhai, Qingfeng Meng, and Yongdong Teng

Northeastern University, China

**A07-06, ICICIC-2009-579**

*Multilayer Architecture Based on HMM and SVM for Fault Classification*

Yujun Pang, Zhen Ma and Yuan Li

Shenyang Institute of Chemical Technology, China

**A07-07, ICICIC-2009-582**

*Fault Diagnosis and Detection Based On Combination With Gaussian Mixture Models and Variable Reconstruction*

Jian Sun, Yuan Li and ChengLin Wen

Shenyang Institute of Chemical Technology, China

**A07-08, ICICIC-2009-1579**

*A Fault Detection for a Correlated Process with the Use of SPC/EPC/NN Scheme*

Yuehjen E. Shao

Fu Jen Catholic University, Taiwan

**A07-09, ICICIC-2009-1774**

*Vibration Fault Diagnosis of Rotating Machinery in Power Plants*

Huo-Ching Sun, Yann-Chang Huang, Kun-Yuan Huang, and Wei-Chi Su

Cheng Shiu University, Taiwan

**A07-10, ICICIC-2009-IS04-03**

*Fault-tolerant Control for a Class of Uncertain Systems with Actuator Faults*

Si-Jun Ye, You-Min Zhang, Xin-Min Wang, and Bin Jiang

Northwest Polytechnical University, China

**A08**

***Innovative Embedded Computing***

Yuan-Long Jeang, Kun Shan University, Tainan

**A08-01, ICICIC-2009-IS02-01**

*Implement of Power Assisted Vehicle Based on Fuzzy Neural Networks*

Tsai-Jiun Ren

Kun Shan University, Taiwan

**A08-02, ICICIC-2009-IS02-02**

*The Corpus Preparation and Effective Feature Representation of Emotional Speech*

Chih-Hsien Huang, Cheng-Hung Tsai, and Bo-Yi Li

Tainan County, Taiwan

**A08-03, ICICIC-2009-IS02-03**

*A Hierarchical Rule-Based Activity Recognition System with Frequency Pattern Mining*

Ji-Yu Li, Po-Cheng Huang, Yau-Hwang Kuo, and Kuan-Rong Lee

Tainan County, Taiwan

**A08-04, ICICIC-2009-IS02-04**

*Fusing Remote Control Usages and Facial Expression for Emotion Recognition*

Meng-Hsuan Fu, Yau-Hwang Kuo, Kuan-Rong Lee, and Chi-Lu Yang

Tainan County, Taiwan

**A08-05, ICICIC-2009-IS02-05**

*A Low-Cost and High Performance Pipelined Code Decompression Engine for ARM-series Processors*

Yuan-Long Jeang and Ko-Yen Hu

Tainan County, Taiwan

**A08-06, ICICIC-2009-621**

*Evaluation of Hierarchical Temporal Memory for a Real World Application*

Wim J. C. Melis, Shuhei Chizuwa, and Michitaka Kameyama

Tohoku University, Japan

**A08-07, ICICIC-2009-826**

*A Method to Model Nonlinear Systems by Neural Networks*

Xifan Yao, Dongyuan Ge, and Zhaotong Lian

South China University of Technology, China

**A08-08, ICICIC-2009-1333**

*A Design Method for 2-Degree-Of-Freedom Modified Smith Predictors*

Kou Yamada, Yoshinori Ando, Takaaki Hagiwara, Iwanori Murakami, and Nghia Thi Mai  
Gunma University, Japan

**A08-09, ICICIC-2009-1546**

*Synthesizing Multichannel Recordings Based on Adaptive Spectrogram Morphing*

Ching-Shun Lin and Chris Kyriakakis  
National Taiwan University of Science and Technology, Taiwan

## **A09**

### ***Intelligent Measurement, Diagnosis and Control (II)***

Xiao-dong Zhang, Northwestern Polytechnical University, China

Lichen Gu, Northwestern Polytechnical University, China

Zhongsheng Wang, Northwestern Polytechnical University, China

### **A09-01, ICICIC-2009-IS09-07**

*Research on Triangle Adaptive Measurement Method for Unknown-surface*

Tao Liu, Zheng Xu, and Zhiyuan Rui

Lanzhou University, China

### **A09-02, ICICIC-2009-IS09-08**

*Early Fault Feature Extraction of Rotor Imbalance and Self-healing Monitoring*

Zhongsheng Wang, Xiang Wang, and Baopeng Luo

Guangdong Polytechnic Normal University, China

### **A09-03, ICICIC-2009-IS09-09**

*Design of Remote Fault Diagnosis System on Aircraft*

Hui Yu, Zhongsheng Wang, and Yuhua Lu

Guangdong Polytechnic Normal University, China

### **A09-04, ICICIC-2009-IS09-11**

*Research on PID Control Technology of Upper Limb Exoskeleton Robot*

Chen He, Xiao-dong Zhang, and Yu-tao Yang

Northwestern Polytechnical University, China

### **A09-05, ICICIC-2009-IS09-12**

*An Intelligent Fuzzy-PID Control System for High-speed Solenoid Valve*

Liang-liang Pu and Xiao-dong Zhang

Northwestern Polytechnical University, China

### **A09-06, ICICIC-2009-562**

*A Method for Recovering Maneuver Targets Spectra Based on the Algorithm of Decontaminating Ionospheric Slow Phase-path Disturbance*

Jun Tang, Chengyu Hou, and Yiyang Shen

Bei Hang University, China

### **A09-07, ICICIC-2009-770**

*Analyzing Alternatives in Collaborative Technology of Software Contractor by Analytic Network Process*

Cheng-Ru Wu, Che-Wei Chang, and Chia-Chun Liao  
Yuanpei University, Taiwan

**A09-09, ICICIC-2009-1060**

*Development of the Adaboost-SVM model for the classification of estrogen receptor- $\beta$  ligands*

ChangHong Zhou and YunTao Zhang  
China West Normal University, China

## **A10**

### ***Cross-discipline Techniques (I)***

Tatsushi Tokuyasu, Oita National College of Technology, Japan

#### **A10-01, ICICIC-2009-508**

*Constructing Self-Access English Learning Centre to Develop Students' Study Autonomy With Digitalized Information Technology In Universities*

Aiping Zheng and Baoping Wang

Northwest A & F University, China

#### **A10-02, ICICIC-2009-1136**

*Data association for cardinalized probability hypothesis density filter*

Yang Wang, Zhongliang Jing, and Shiqiang Hu

Shanghai Jiao Tong University, China

#### **A10-03, ICICIC-2009-1317**

*Establishment of A Deformable Aorta Model based on Patient's Chest CT Data*

Tatsushi Tokuyasu, Takashi Shuto, Kenji Yufu, Hironori Abe, Akira Marui, Shotaro Kanao, and Masashi Komeda

Oita National College of Technology, Japan

#### **A10-04, ICICIC-2009-1327**

*The Parametrization of All Disturbance Observers for Time-Delay Plants with Input Disturbance*

Kou Yamada, Da Zhi Gong, Takaaki Hagiwara, Iwanori Murakami, Yoshinori Ando, Yoichi Imai, and Masahiko Kobayashi

Gunma University, Japan

#### **A10-05, ICICIC-2009-1338**

*The Parametrization of All Robust Stabilizing Modified Repetitive Controllers for Time-Delay Plants with The Specified Input-Output Frequency Characteristic*

Kou Yamada, Nobuaki Nakazawa, Takaaki Hagiwara, Iwanori Murakami, Yoshinori Ando, Jia Wei Liu, Shun Yamamoto, and Tatsuya Sakanushi

Gunma University, Japan

#### **A10-06, ICICIC-2009-1391**

*Measure Bevel Gear and Corresponding Three Dimension Solid Model Founded*

Zhi Wang, Zhaoyao Shi, and Huakun Xie

Beijing University of Technology, China

#### **A10-07, ICICIC-2009-1396**

*Modeling of Rigid-Flexible Coupling System Dynamics for Railway Vehicles with Flexible Bogie Frame*

Yao-Hui Lu, Jing Zeng, Ping-bo Wu, and Qing-hua Guan  
Southwest Jiaotong University, China

**A10-08, ICICIC-2009-1412**

*Accurate Dual Slope ADC Using Bootstrap Circuit*

Amphawan Julsereewong, Sawai Pongswatd, Vanchai Riewruja, Hirofumi Sasaki, Kuniaki Fujimoto, and Yan Shi  
King Mongkut's Institute of Technology Ladkrabang, Thailand

**A10-09, ICICIC-2009-1418**

*Integrating m-Machine Scheduling into MRP*

Ruedee Masuchun, Wiboon Masuchun, and Teerawat Thepmanee  
King Mongkut's Institute of Technology Ladkrabang, Thailand

**B01*****Cross-discipline Techniques (II)***

Kei Eguchi, Shizuoka University, Japan

**B01-01, ICICIC-2009-850**

*Design of a Step-Down AC-DC Converter for Energy Harvesting System Using Vibration-Based Energy*

Kei Eguchi, Sawai Pongswatd, Hirofumi Sasaki, Kitti Tirasesth, Tatsuya Sugimura, and Takahiro Inoue

Shizuoka University, Japan

**B01-03, ICICIC-2009-1566**

*The causes of poor eyesight among primary school students - A longitudinal study*

Shin-Feng Chen, Shuyi Wang, and Yuan-Horng Lin

National Pingtung University of Education, Taiwan

**B01-04, ICICIC-2009-1609**

*Coordination of Production and Transportation Scheduling in Steel Making Process*

Yousuke Ozoe and Masami Konishi

Okayama University, Japan

**B01-05, ICICIC-2009-1702**

*Visualization and Analysis of Mental States Based on Photoplethysmogram*

Keiichi Horio and Ying Li

Kyushu Institute of Technology, Japan

## **B02**

### ***Cross-discipline Techniques (III)***

Wen-Chung Chang, Southern Taiwan University, Taiwan

Chin-Shiuh Shieh, National Kaohsiung University of Applied Sciences, Taiwan

### **B02-01, ICICIC-2009-1708**

*Modelling and Simulation of Shape Memory Alloys Micro-actuator*

Hong Liang, Chunnian Zeng, and Christophe Giraud-Audine

Wuhan University of Technology, China

### **B02-02, ICICIC-2009-1730**

*A Frequency-Tracking FPGA Chip for High-Power Ultrasound Resonator*

Kai-Hsing Ma, Wen-Chung Chang, and Yung-Chun Lee

Southern Taiwan University, Taiwan

### **B02-03, ICICIC-2009-1762**

*Multiple Stress Effect Analysis on Pneumatic Cylinders Accelerated Life Testing*

Juan Chen, Deyi Wang, Qiang Wu, and Zhanlin Wang

Beihang University, China

### **B02-04, ICICIC-2009-1781**

*Fault Diagnosis of Power Transformers Using Rough Set Theory*

Yann-Chang Huang, Huo-Ching Sun, Kun-Yuan Huang, and Yi-Shi Liao

Cheng Shiu University, Taiwan

### **B02-05, ICICIC-2009-1793**

*Modeling and Quantification of Superficial Features Extracted from Source Codes: In Consideration of Fluctuation of Description among Learning Data*

Asako Ohno and Hajime Murao

Kobe University, Japan

## **B03**

### ***Cross-discipline Techniques (IV)***

Kouji Nakagawa, Okayama University, Japan

Bing-Hong Liu, National Kaohsiung University of Applied Sciences, Taiwan

### **B03-01, ICICIC-2009-1347**

*Fast Coding Mode Selection for Rate-Distortion Optimization in H.264/AVC*

Shih-Ren Wu, Szu-Hong Wang, and Shih-Chang Hsia

National Kaohsiung First University of Science and Technology, Taiwan

### **B03-02, ICICIC-2009-1441**

*Phase Properties of Complex Wavelet coefficients*

Guo-Rui Zhou, Wen-Jiang Wang, and Shi-Xin Sun

University of Electronic Science and Technology of China, China

### **B03-03, ICICIC-2009-1499**

*Design Support of Transportation Routing by Agent Method*

Kouji Nakagawa, Masami Konishi, and Jun Imai

Okayama University, Japan

### **B03-04, ICICIC-2009-1720**

*Simple CCO Using CCHs and S-R Latch and Its Application*

Manop Chumkasean, Amphawan Julsereewong, Sawai Pongswatd, Prasit Julsereewong, and

Hirofumi Sasaki

King Mongkut's Institute of Technology Ladkrabang, Thailand

### **B03-05, ICICIC-2009-1787**

*Sensor Motion Tracking by IMM-Based Extended Kalman Filters*

Chin-Der Wann and Jian-Hau Gao

National Sun Yat-Sen University, Taiwan

## **B04**

### ***Cross-discipline Techniques (V)***

Eun-Jun Yoon, Kyungpook National University, Korea

Kee-Young Yoo, Kyungpook National University, Korea

Hsin-Wen Ting, National Kaohsiung University of Applied Sciences, Taiwan

### **B04-01, ICICIC-2009-1830**

*Composite Adaptive Position Control and Rotor Time Constant Estimation for Induction Motors Based on Passivity Theorem*

Jenn-Yih Chen and Bean-Yin Lee

National Formosa University, Taiwan

### **B04-02, ICICIC-2009-1851**

*3PSA: 3-Party Smart card-based Authentication Scheme*

Eun-Jun Yoon and Kee-Young Yoo

Kyungpook National University, Korea

### **B04-03, ICICIC-2009-1867**

*Generic regularization of boosting-based algorithms for the discovery of regime-independent portfolio strategies from high-noise time series*

Olga Barinova and Valeriy V. Gavrishchaka

Moscow State University, Moscow

### **B04-04, ICICIC-2009-1954**

*Value Based Fuzzy Requirement Prioritization and its Evaluation Framework*

M. Ramzan, M. Arfan Jaffar, M. Amjad Iqbal, Sajid Anwar, and Arshad A. Shahid

National University of Computer & Emerging Sciences, Pakistan

### **B04-05, ICICIC-2009-1983**

*A Dividing Ratio Changeable Digital PLL Using VCO as Base Clock Source*

Mitsutoshi Yahara, Kuniaki Fujimoto, Takanori Hirose, and Hirofumi Sasaki

Tokai University School of Industrial Engineering, Japan

## **B05**

### ***Cross-discipline Techniques (VI)***

Rawshan Basha, University of Glamorgan, UK

Jamal Ameen, University of Glamorgan, UK

#### **B05-01, ICICIC-2009-1991**

*Mining Multiple Periodic Time Series for Detecting Unusual Sub-Sequences*

Jamal Ameen and Rawshan Basha

University of Glamorgan, UK

#### **B05-02, ICICIC-2009-1725**

*Decision Feedback Equalizers Using Self-Constructing Fuzzy Neural Networks*

Yao-Jen Chang and Chia-Lu Ho

National Central University, Taiwan

#### **B05-03, ICICIC-2009-1742**

*The Comparison between Multivariate Fuzzy Time Series and Traditional Time Series Modeling to Forecasting China Exports*

Chi-Chen Wang, Yi-Hsien Tu, and Hsien-Lun Wong

National Defense University, Taiwan

#### **B05-04, ICICIC-2009-1839**

*An Efficient FUSP-Tree Update Algorithm for Deleted Customer Sequences*

Chun-Wei Lin, Tzung-Pei Hong, Wen-Hsiang Lu

National Cheng Kung University, Taiwan

#### **B05-05, ICICIC-2009-2006**

*Surface topographic analysis in northern part of HuaTung Valley, Taiwan*

Atsushi Iwashita, Seijin Tanaka, Hisatoshi Baba, Masanao Hara, Yu-Feng Lin, Marina Kudo,

Tadakuni Miyazaki and Toshikazu Morohoshi

Tokai University, Japan

## **B06**

### ***Novel Approaches to Pervasive Applications***

Bao Rong Chang, National University of Kaohsiung, Taiwan

Din Jong, Chung Hwa University of Medical Technology, Taiwan

#### **B06-01, ICICIC-2009-IS06-01**

*Embedded System for Inter-Vehicle Heterogeneous-Wireless-based Real-Time Multimedia Streaming and Video/Voice over IP*

Bao Rong Chang, Chung-Ping Young, Hsiu Fen Tsai, and Ren-Yang Fang

National University of Kaohsiung, Taiwan

#### **B06-02, ICICIC-2009-IS06-02**

*Applying Fuzzy Approach on Choosing Between Growth and Return*

Tien-Tsai Huang and Jen-Lung Liu

Lunghwa University of Science and Technology, Taiwan

#### **B06-03, ICICIC-2009-604**

*Automatic Detection and Tracking of Moving Object Employing a Particle Filter*

Budi Sugandi, Hyoungeop Kim, Joo Kooi Tan, and Seiji Ishikawa

Kyushu Institute of Technology, Japan

#### **B06-04, ICICIC-2009-1245**

*A Multilevel Thresholding Method Based on Cross Entropy and Genetic Algorithms*

Shu-Chien Huang

National Pingtung University of Education, Taiwan

#### **B06-05, ICICIC-2009-1281**

*An Automatic Generation Method of Executable Test Case Using Model-Driven Architecture*

Fuqing Wang, Shuai Wang, and Yindong Ji

Tsinghua University, China

#### **B06-06, ICICIC-2009-1619**

*Adaptive Delay Splitting for Efficient RFID Tag Identification*

N.W. Lo, Enrico Winata, and Kuo-Hui Yeh

National Taiwan University of Science and Technology, Taiwan

#### **B06-07, ICICIC-2009-1651**

*An Efficient Diffie-Hellman-MAC Key Exchange Scheme*

Eun-Jun Yoon and Kee-Young Yoo

Kyungpook National University, Korea

**B06-08, ICICIC-2009-429**

*A Fast Image Inpainting Algorithm Based on Structure*

Ben Guo, Chuang-bai Xiao, Qiao-chu Sun, Lu Liu, and Feng Su

Beijing University of Technology, China

**B06-09, ICICIC-2009-1151**

*The Acceptance and Use of the Learning Management System*

Din Jong

Chung Hwa University of Medical Technology, Taiwan

**B07*****Advanced Image Recognition and Retrieval***

Takashi Toriu, Osaka City University, Japan

Hiromitsu Hama, Osaka City University, Japan

**B07-01, ICICIC-2009-IS14-01*****Evaluation of Multiwavelength Band-Pass Filter Endoscope Using Compound Eye Optical System***

Kento Tabata, Hideya Takahashi, and Kenji Yamada

Osaka City University, Japan

**B07-02, ICICIC-2009-IS14-02*****Fourier Transform-based Three-dimensional Profile Acquisition Method Implemented by Graphics Processing Unit***

Nobukazu Yoshikawa and Syogo Yamazaki

Saitama University, Japan

**B07-03, ICICIC-2009-IS14-03*****Reliability Based Web Information Ranking System***

Pyke Tin, Thi Thi Zin, Takashi Toriu, and Hiromitsu Hama

Osaka City University, Japan

**B07-04, ICICIC-2009-IS14-04*****An Optimal Choice of Morphological Operating Center for Object Image Retrieval***

Hiromitsu Hama, Thi Thi Zin, and Pyke Tin

Osaka City University, Japan

**B07-05, ICICIC-2009-IS14-05*****Bundling Multislit-HOG Features of Near Infrared Images for Pedestrian Detection***

Thi Thi Zin, Pyke Tin, and Hiromitsu Hama

Osaka City University, Japan

**B07-06, ICICIC-2009-IS14-06*****Accurate Estimation of Wheel Center Points for Estimate of Vehicle Baseline Length in a Circular Fisheye Image***

Kenichi Hirose, Takashi Toriu, and Hiromitsu Hama

College of Industrial Technology, Japan

**B07-07, ICICIC-2009-IS14-07*****Monte Carlo Localization Robust against Successive Outliers***

Shigeyoshi Nakajima, Masataka Ikejiri, and Takashi Toriu

Osaka City University, Japan

**B07-08, ICICIC-2009-450**

*Wavelet-based Face Recognition Method by Using Support Vector Machine*

Yi Liu, Tao Sun, Huang Yang, Yongmi Yang, and Xinhong Zhou

Shandong University, China

**B07-09, ICICIC-2009-1614**

*Real Time Tracking Multiple YUV 24-Bit Color Objects With 8-Bit MCU-Based Embedded Vision System*

Hoang-Nam Nguyen and An-Chen Lee

National Chiao Tung University, Taiwan

**B08*****Identification for Optimization in Nonlinear Systems***

Manuel Jimenez-Lizarraga, Autonomous University of Nuevo Leon, Mexico

**B08-01, ICICIC-2009-IS32-01*****Dynamic Controller Approach to Algebraic Constraints in Linear Systems***

M. Jimenez-Lizarraga and J. B. Cruz, Jr.

Autonomous University of Nuevo Leon, Mexico

**B08-02, ICICIC-2009-IS32-02*****On the Time Inconsistency Problem in Uncertain Stackelberg Differential Games***

M. Jimenez-Lizarraga and J. B. Cruz, Jr.

Autonomous University of Nuevo Leon, Mexico

**B08-03, ICICIC-2009-IS32-05*****A Human Migration Model with Consistent Conjectures***

V. Kalashnikov, N. Kalashnykova, and L. Chavez

Autonomous University of Nuevo Leon, Mexico

**B08-04, ICICIC-2009-IS32-08*****Central Suboptimal  $H^\infty$  Controller Design for Linear Systems with Unknown Parameters***

Michael Basin, Pedro Soto, and Dario Calderon-Alvarez

Autonomous University of Nuevo Leon, Mexico

**B08-05, ICICIC-2009-IS32-09*****Optimal Control for Stochastic Polynomial Systems with State-Dependent Polynomial Input***

Michael Basin, Alexander Loukianov and Miguel Hernandez-Gonzalez

Autonomous University of Nuevo Leon, Mexico

**B08-06, ICICIC-2009-337*****New Elite Multi-parent Crossover Evolutionary Optimization Algorithm Based on Parameters******Tuning Controlled by Fractional-order PID and Its Application***

Mingshan CAI, Xianggao PAN, and Yunfeng DU

Hunan University of Arts and Sciences, China

**B08-07, ICICIC-2009-734*****Model identification and Control method Study of Electro-hydraulic Pressure Servo System***

Junpeng Shao, Guihua Han, Yuhong Dong, and Zhongwen Wang

Harbin University of Science and Technology, China

**B08-08, ICICIC-2009-1076**

*Feature Extraction of Edible Oil FTIR Based on Fractal Geometry*

Qiaochu Sun, Chuang-bai Xiao, Ben Guo and Qun-fei Mu

Beijing University of Technology, China

**B08-09, ICICIC-2009-1480**

*Identification Method of Main Structural Vibration Modal based on Information Filtering*

Baifeng GAO, Huijian LI, and Xin JIANG

Yahshan University, China

## **B09**

### ***Computer Technologies for Intelligent Systems***

Zhong Zhang, Toyohashi University of Technology, Japan

Katsuhiro Inoue, Kyushu Institute Technology, Japan

Shunsuke Ishimitsu, Hiroshima City University, Japan

### **B09-01, ICICIC-2009-IS03-01**

*Body-conducted Speech Recognition in Speech Support System for Disorders*

Shunsuke Ishimitsu, Kouhei Oda, and Masashi Nakayama

Hiroshima City University, Japan

### **B09-02, ICICIC-2009-IS03-02**

*Design Method of Morphological Structural Function for Pattern Recognition of EEG Signals during Motor Imagery and Cognition*

Tomonari Yamaguchi, Mitsuhiro Fujio, Katsuhiro Inoue and Gert Pfurtscheller

Kyushu Institute Technology, Japan

### **B09-03, ICICIC-2009-IS03-03**

*A Study on Japanese Historical Character Recognition using Modular Neural Networks*

Tadashi Horiuchi and Satoru Kato

Matsue College of Technology, Japan

### **B09-04, ICICIC-2009-IS03-04**

*A New Design Method of Multi-Valued Cellular Neural Networks for Associative Memory*

Zhong Zhang, Ryuichi Taniai, Takuma Akiduki, Takashi Imamura, and Tetsuo Miyake

Toyohashi University of Technology, Japan

### **B09-05, ICICIC-2009-IS03-05**

*Neural Network Model of the Impression Evaluation for Button Sounds*

Gen Onishi, Shunsuke Ishimitsu, Koji Sakamoto, Toshikazu Yoshimi, Yuichi Fujimoto, and Kenichi Kawasaki

Hiroshima International University, Japan

### **B09-06, ICICIC-2009-IS03-06**

*Detection of Knocking by Wavelet Transform using Ion Current*

Zhong Zhang, Noriho Saiki, Hiroshi Toda, Takashi Imamura, and Tetsuo Miyake

Toyohashi University of Technology, Japan

### **B09-07, ICICIC-2009-IS03-07**

*Analysis the Relation between Material Structure and Auditory Impression*

Koji Sakamoto, Shunsuke Ishimitsu, Takeshi Oda  
Hiroshima City University, Japan

**B09-08, ICICIC-2009-266**

*Source Sentence Reordering for Phrase-based Machine Translation Systems*

Chung-chi Huang, Wei-teh Chen, and Jason S. Chang

National Tsing Hua University, Taiwan

**B09-09, ICICIC-2009-475**

*Boundary Finding Combining Wavelet and Markov Random Field Segmentation based on Maximum Entropy Theory*

Pei-Ju Chao, Tsair-Fwu Lee, Te-Jen Su, Chieh Lee, Ming-Yuan Cho, and Chang-Yu Wang

National Kaohsiung University of Applied Sciences, Taiwan

## **B10**

### ***Innovative Intelligent System and Control (I)***

Akira Yanou, Okayama University, Japan

Takao Sato, University of Hyogo, Japan

#### **B10-01, ICICIC-2009-IS31-01**

*Fast rate Adaptive Output Feedback Control of Multirate Sampled Systems with an Adaptive Output Estimator*

Ikuro Mizumoto, Nao Watanabe, and Zenta Iwai

Kumamoto University, Japan

#### **B10-02, ICICIC-2009-IS31-02**

*Automatic Path Search for Roving Robot Using Reinforcement Learning*

Shigeharu Miyata, Hitomi Nakamura, Akira Yanou, and Shin Takehara

Kinki University, Japan

#### **B10-03, ICICIC-2009-IS31-03**

*Slope-Walking of a Biped Robot with K Nearest Neighbor Method*

Junichi Nagasue, Yasuo Konishi, Nozomu Araki, Takao Sato, and Hiroyuki Ishigaki

University of Hyogo, Japan

#### **B10-04, ICICIC-2009-IS31-04**

*Robust Adaptive Control against Actuator Failures*

Masanori Takahashi

Tokai University, Japan

#### **B10-05, ICICIC-2009-IS31-05**

*Development of High Speed Controller of Container Crane by Binary Input Using Mixed Logical Dynamical System*

Yuya Tanaka, Yasuo Konishi, Nozomu Araki, Takao Sato, and Hiroyuki Ishigaki

University of Hyogo, Japan

#### **B10-06, ICICIC-2009-439**

*GA approach for Designing Fuzzy Model with Wavelet Transforms*

Shian-Tang Tzeng

Kao Yuan University, Taiwan

#### **B10-07, ICICIC-2009-2014**

*Wavelet-Domain Distributed Video Coding Using Optimized TCQ*

Yi Zheng, Anhong Wang, and Zhihong Li

Taiyuan University of Science and Technology, China

**B10-08, ICICIC-2009-1583**

*Design of LMI-Based Fuzzy Controller for Robot Arm Using Quantum Evolutionary Algorithms*

Gwo-Ruey Yu and Lun-Wei Huang

National Ilan University, Taiwan

**B10-09, ICICIC-2009-1682**

*Fuzzy Adaptive Controller with Modulated Membership Function for a MIMO Uncertain Nonlinear System*

Leehter Yao and Wei-Jun Pan

National Taipei University of Technology, Taiwan

## **B11**

### ***Recent Advances on Swarm Intelligence***

Shin-Ying Huang, National Chengchi University, Taiwan

Hsiang-Cheh Huang, National University of Kaohsiung, Taiwan

### **B11-01, ICICIC-2009-IS16-01**

*Stochastic Dynamic Step Length Particle Swarm Optimization*

Xingjuan Cai, Zhihua Cui, and Ying Tan

Taiyuan University of Science and Technology, China

### **B11-02, ICICIC-2009-IS16-02**

*A Hybrid Particle Swarm Optimization Algorithm with Diversity for Flow-shop Scheduling Problem*

Shin-Ying Huang and Chuen-Lung Chen

National Chengchi University, Taiwan

### **B11-03, ICICIC-2009-IS16-03**

*New Particle Swarm Optimization Algorithm for Makespan Minimization in Permutation Flowshop Sequencing*

Ting-Yu Chen and Chuen-Lung Chen

National Chengchi University, Taiwan

### **B11-04, ICICIC-2009-IS16-05**

*Optimization of Machining Allowance of Propeller based on Particle Swarm Algorithms*

Jingui Lu, Dan Liu, and Fengxin Chen

Nanjing University of Technology, China

### **B11-05, ICICIC-2009-IS16-07**

*An Extended Artificial Physics Optimization Algorithm for Global Optimization Problem*

Liping Xie and Jianchao Zeng

College of Electrical and Information Engineering Lanzhou, China

### **B11-06, ICICIC-2009-862**

*Solving Sudoku Puzzles using Improved Artificial Bee Colony Algorithm*

Jaysonne A. Pacurib, Glaiza Mae M. Seno, and John Paul T. Yusiong

University of the Philippines Visayas Tacloban College, Philippine

### **B11-07, ICICIC-2009-1362**

*Construction of Cascaded Traffic Sign Detector Using Generative Learning*

Keisuke Doman, Daisuke Deguchi, Tomokazu Takahashi, Yoshito Mekada, Ichiro Ide, and Hiroshi Murase

Nagoya University, Japan

**B11-08, ICICIC-2009-1474**

*Gradient Enhanced Particle Swarm Optimization for Unconstrained Problems*

Erwie Zahara, Yi-Tung Kao, and Chia-He Liu

St John's University, Taiwan

**B11-09, ICICIC-2009-1515**

*An Improved Particle Swarm Optimization with Feasibility-based Rules for Mixed-variable Optimization Problems*

Chao-Li Sun, Jian-chao Zeng, and Jeng-Shyang Pan

Taiyuan University of Science and Technology, China

## **B12**

### ***Control system and Applications***

Kuo-Lan Su, National Yunlin University of Science & Technology, Taiwan

Chun-Chieh Wang, Chienkuo Technology University, Taiwan

### **B12-01, ICICIC-2009-IS34-01**

*Mobile Robot Based Online Chinese Chess Game*

Kuo-Lan Su, Sheng-Ven Shiau, Jr-Hung Guo, and Chi-Wei Shiau

National Yunlin University of Science & Technology, Taiwan

### **B12-02, ICICIC-2009-IS34-02**

*Mixed-Integer Evolutionary Optimization of Artificial Neural Networks*

Yung-Chin Lin, Yung-Chien Lin, Kuo-Lan Su, and Wen-Cheng Chang

WuFeng Institute of Technology, Taiwan

### **B12-03, ICICIC-2009-IS34-03**

*Laser Range Finder Applying in Motion Control System of Mobile Robots*

Jr-Hung Guo, Kuo-Lan Su, Chung-Chieh Wang, and Chia-Ju Wu

National Yunlin University of Science & Technology, Taiwan

### **B12-04, ICICIC-2009-IS34-04**

*The Development of the Mobile Robot for Taking Care of Elderly People*

Jyh-Hwa Tzou and Feng-Chun Chiang

WuFeng Institute of Technology, Taiwan

### **B12-05, ICICIC-2009-IS34-05**

*Implementation of a Tour Guide Robot via Shape Recognition and Path Planning*

Chung-Chieh Wang, Kuo-Lan Su, and Chih-Ten Shen

Chienkuo Technology University, Taiwan

### **B12-06, ICICIC-2009-IS34-06**

*Camera Position Estimation from Image by ANFIS*

Kuo-Hsien Hsia, Chao-Fan Lien, Chun-Chieh Wang, and Juhng-Perng Su

Chienkuo Technology University, Taiwan

### **B12-07, ICICIC-2009-IS34-07**

*Implement of a Multi-Integral Sliding Mode Controller for a Pneumatic Cylinder Position Servo Control System*

Hong-Ming Chen, Zi-Yi Chen, and Ming-Cheng Chung

Chienkuo Technology University, Taiwan

**B12-08, ICICIC-2009-713**

*The  $H^\infty$  Optimal Control of Linear Systems with Actuators Magnitude and Rate Saturation*

Pang-Chia Chen, Shi-Jaw Chen, and Chih-Hua Hsu

Kao Yuan University, Taiwan

**B12-09, ICICIC-2009-1685**

*Design of Adaptive Fuzzy PID Controller For Nonlinear System*

Leehter Yao and Kian-Leong Lim

National Taipei University of Technology, Taiwan

## **B13**

### **RFIC for Wireless Control**

Chun-Lin Lu, Kun Shan University, Taiwan

Tzuen-Hsi Huang, National Cheng Kung University, Taiwan

#### **B13-01, ICICIC-2009-IS10-01**

*On-Chip Trifilar-Transformer-Coupled Quadrature Signal Generation Methodology*

Yan-Ru Tseng, Chih-Yu Liu, and Tzuen-Hsi Huang

National Cheng Kung University, Taiwan

#### **B13-02, ICICIC-2009-IS10-02**

*Integrated Ka-band Transceiver MMIC Chips*

Pramod K. Singh, Sarbani Basu, and Yeong-Her Wang

National Cheng Kung University, Taiwan

#### **B13-03, ICICIC-2009-IS10-03**

*A Novel Post-linearization Technique for Fully Integrated 5.5 GHz High-linearity LNA*

Chieh-Pin Chang, Ja-Hao Chen, Shih-Han Hung, Chun-Chi Su and Yeong-Her Wang

National Cheng Kung University, Taiwan

#### **B13-04, ICICIC-2009-IS10-04**

*A Dual-band Current-reused LNA with the Switching of LC-resonances*

Ruey-Lue Wang, Ciao-Ning Cai, Chien Hsuan Liu, Hung-Hsi Chien, Chung-Chin Chuang, Yi-Shu Lin and Yan-Kuin Su

National Kaohsiung Normal University, Taiwan

#### **B13-05, ICICIC-2009-IS10-05**

*A Speed-Improved Architecture for CMOS Programmable Divider*

Ching-Wen Hsu, Yu-Sheng Lin, Chun-Lin Lu, Yeong-Her Wang, and Kuo-Sheng Cheng

Kun Shan University, Taiwan

#### **B13-06, ICICIC-2009-IS10-06**

*CMOS-based Active Tunable Radio Frequency Filter*

Jin-Shun Li, Jheng-Da Wu, Yen-Lung Chiang, Ming-Liang Shieh, Chih-Ho Tu, Janne-Wha Wu, Ching-Wen Tang, Chih-Ho Tu and Ying-Zong Juang

National Chung Cheng University, Taiwan

#### **B13-07, ICICIC-2009-781**

*Congestion Control for TCP/AQM Network using LMI Approach*

Hugang Han, and Chun-Xiang Chen

Prefectural University of Hiroshima, Japan

**B13-08, ICICIC-2009-1444**

*Design of RFID Antenna for 2.45GHz Applications*

Yuh-Yih Lu, Shih-Chiang Wei, and Hsiang-Cheh Huang

Ming-Hsin University of Science and Technology, Taiwan

**B13-09, ICICIC-2009-1696**

*Research and Application of Dynamic Shape Control Strategy for Cold Rolled Wide Strip*

Chongtao Wang, Quan Yang, Zhengyi Jiang, Xiaozhong Du, and Peng Peng

University of Science and Tech, China

## **B14**

### ***Intelligent Computing, 3D Model Retrieval, and Data Hiding***

Feng-Tse Lin, Chinese Culture University, Taiwan

Tzong-Ru Tsai, Tamkang University, Taiwan

#### **B14-01, ICICIC-2009-IS13-01**

*Shortest Path Problem Based on Interval-valued Fuzzy Numbers and Signed Distance Defuzzification Method*

Feng-Tse Lin

Chinese Culture University, Taiwan

#### **B14-02, ICICIC-2009-IS13-02**

*Inference on the MTTF of LEDs from Accelerated Degradation Data with Bootstrap Method*

Tzong-Ru Tsai, Chin-Wei Lin, Chiu-Ling Chen, and Sheng-Pan Huang

Tamkang University, Taiwan

#### **B14-03, ICICIC-2009-IS13-03**

*Path Converged Design Application to Alternative Strategy of Migration*

Juying Zeng, Bing Xu, and Yafen Wang

Zhejiang Gongshang University, China

#### **B14-04, ICICIC-2009-IS13-04**

*Analysis of Longitudinal Ordinal Data with Drop-out*

Yi-Ju Chen, Yi-Hua Huang, and Kuo-Chin Lin

Tamkang University, Taiwan

#### **B14-05, ICICIC-2009-IS26-03**

*Video Abstraction via Attention Model and On-line Clustering*

Yue-Nan Li and Zhe-Ming Lu

Harbin Institute of Technology Shenzhen Graduate School, China

#### **B14-06, ICICIC-2009-843**

*Determining 3-D Translational Motion by the Parallel Binocular*

Gwo-Long Lin

Kao Fong College, Taiwan

#### **B14-07, ICICIC-2009-1592**

*A Reversible JPEG-to-JPEG Data Hiding Technique*

Ziqiang Cheng and Kee-Young Yoo

Kyungpook National University, Korea

**B14-08, ICICIC-2009-1987**

*High Capacity Reversible Data Hiding with Adjacent-Pixel-Based Difference Expansion*

Hsiang-Cheh Huang, I-Hung Wang, and Yuh-Yih Lu

National University of Kaohsiung, Taiwan

**B14-09, ICICIC-2009-1408**

*A Robust Watermarking Technique Based on Image Dual Interpolations*

Yu-Chi Liu, Wen-Lung Yang, Chwei-Shyong Tsai, and Shyr-Shen Yu

National Chung Hsing University, Taiwan

**B14-10, ICICIC-2009-1595**

*A Novel Multiple Digital Watermarking Scheme for the Copyright Protection of Image*

Gil-Je Lee, Eun-Jun Yoon, and Kee-Young Yoo

Kyungpook National University, Korea

## **B15**

### ***Innovative Intelligent System and Control (II)***

Akira Yanou, Okayama University, Japan

Takao Sato, University of Hyogo, Japan

### **B15-01, ICICIC-2009-IS31-06**

*Nonlinear Control of Two-link Planar Manipulator Using Unstable Property of Zerodynamics*

Tomohiro Henmi, Shinsaku Izumi, Mingcong Deng, and Akira Inoue

Takamatsu National College of Technology, Japan

### **B15-02, ICICIC-2009-IS31-07**

*A Design method of Extended Generalized Minimum Variance Control Based on State Space Approach by Using a Genetic Algorithm*

Akira Yanou, Mingcong Deng, and Akira Inoue

Okayama University, Japan

### **B15-03, ICICIC-2009-IS31-08**

*Vehicle's Orientation Measurement Method by Single-Camera Image Using Known Shape Planar Object*

Nozomu Araki, Takao Sato, Yasuo Konishi, and Hiroyuki Ishigaki

University of Hyogo, Japan

### **B15-04, ICICIC-2009-IS31-09**

*Grasping and Transportation Control of a Chopsticks-type Robot*

Yojiro Yamasaki, Toru Tsumugiwa, and Ryuichi Yokogawa

Department of Mechanical Engineering, Japan

### **B15-05, ICICIC-2009-IS31-10**

*Improvement in Gain Margin for a Dual-rate System*

Takao Sato, Junichi Asakura, Nozumu Araki, and Yasuo Konishi

University of Hyogo, Japan

### **B15-06, ICICIC-2009-136**

*Research on Synchronous Control in Dyeing Systems Using Fuzzy-Extension Strategies*

Hui Zhu, Yannian Rui, and Yongshan Wang

Soochow University, China

### **B15-07, ICICIC-2009-999**

*Learning System Using Hierarchical Fuzzy ART for Two-Player Games*

Jun-ich kushida, Iori Nakaoka, Kazuhisa Oba, and Katsuari Kamei

Ritsumeikan University, Taiwan

**B15-08, ICICIC-2009-1461**

*Fuzzy Retrieval System Employing Image Processing for Car Shape*

Takashi Samatsu, Kie Tachikawa, and Yan Shi

Tokai University, Japan

**B15-09, ICICIC-2009-497**

*A Novel Optimal Bus Design Method for Modular Spacecraft*

Dan Cui, Jun-Bao Li

Harbin Institute of Technology Shenzhen Graduate School, China

## **C01**

### ***Intellectual Systems and Interfaces (I)***

Xiangshi Ren, Kochi University of Technology, Japan

Jien Kato, Nagoya University, Japan

#### **C01-01, ICICIC-2009-IS36-01**

*Digest Generation of Kindergarten Surveillance Video with Location Information and Visual Features*

Yu Wang, Jien Kato, Wei Zhou, and Shigeki Yokoi

Nagoya University, Japan

#### **C01-02, ICICIC-2009-IS36-02**

*An Archive System of Japanese Traditional Craftworks using 3DBlog*

Yoshio NISHIO, Shigeki YOKOI, and Takami YASUDA

Culture Kinjo Gakuin University, Japan

#### **C01-03, ICICIC-2009-IS36-03**

*Astronomy News Element Analysis and Visualization System for the Web*

Yulin Chen, Katsuhiko Mouri, Mayu Kondo, and Takami Yasuda

Nagoya University, Japan

#### **C01-04, ICICIC-2009-IS36-04**

*Research on Probability of Emergency*

Liyan Dong, Hailong Zhang, Bocheng Zhang, and Zhen Li

Jilin University, China

#### **C01-05, ICICIC-2009-IS36-05**

*A Real-time Intrusion Detection Security Visualization Framework based on Planner-scheduler*

Nurbol Luktarhan, Huan Xu, Hao Yang, Fan-er Meng, and Liang Hu

Jilin University, China

#### **C01-06, ICICIC-2009-635**

*Image Reconstruction Algorithm Based on Inverse Problem for Multi-excitation-modes Electromagnetic Tomography System*

Min He and Xiaoyan Xu

Shanghai Maritime University, China

## **C02**

### **Motor Electronic and Control Applications (I)**

Cheng-Fu Yang, National University of Kaohsiung, Taiwan

Cheng-Yi Chen, Cheng Shiu University, Taiwan

#### **C02-01, ICICIC-2009-IS28-01**

*Analog PWM and Digital PWM Controller IC for DC/DC Converters*

Li-Jen Liu, Yeong-Chau Kuo, and Wen-Chieh Cheng

National Kaohsiung First University of Science and Technology, Taiwan

#### **C02-02, ICICIC-2009-IS28-02**

*Synchronized Motion Control for Power-Wheelchairs*

Ming-Ching Tsai, Kai-Sheng Wu, and Po-Wen Hsueh

National Kaohsiung University of Applied Sciences, Taiwan

#### **C02-03, ICICIC-2009-IS28-03**

*Effect of Inverter Parameters on Iron Losses in a PWM Inverter-Fed Induction Motor*

Wen-Chang Tsai

Kao Yuan University, Taiwan

#### **C02-04, ICICIC-2009-IS28-04**

*Synchronization Controller Synthesis of Multi-Axis Motion System*

Marvin H.-M. Cheng, Aniruddha Mitra, and Cheng-Yi Chen

Georgia Southern University, USA

#### **C02-05, ICICIC-2009-IS28-05**

*DSP based Control of Parallel DC-DC Buck Converters by Optimal Multi-Input Multi-Output Discrete Integral Variable Structure Control Scheme*

Li-Peng Yin, Chi-Cheng Cheng, Chin-Wen Chuang, and Cheng-Yi Chen

National Sun Yat-sen University, Taiwan

#### **C02-06, ICICIC-2009-816**

*Hourly Forecasting of Long Term Electric Energy Demand Using a Novel Modeling Approach*

Ümmühan Basaran Filik, Ömer Nezir Gerek, and Mehmet Kurban

Anadolu University, Turkey

## **C03**

### ***Innovative Applications of Data Mining and Knowledge Management***

Hsin-Chang Yang, National University of Kaohsiung, Taiwan

Chung-Hong Lee, National Kaohsiung University of Applied Sciences, Taiwan

#### **C03-01, ICICIC-2009-IS33-01**

*A Location Based Text Mining Approach for Geospatial Data Mining*

Chung-Hong Lee, Hsin-Chang Yang, and Shih-Hao Wang

National Kaohsiung University of Applied Sciences, Taiwan

#### **C03-02, ICICIC-2009-IS33-02**

*Detecting Step-Stone with Network Traffic Mining Approach*

Han-Wei Hsiao and Wei-Cheng Fan

National University of Kaohsiung, Taiwan

#### **C03-03, ICICIC-2009-IS33-03**

*Combining Social Network Analysis and Web Mining Techniques to Discover Interest Groups in the Blogspace*

Hui-Ju Wu, I-Hsien Ting, and Kai-Yu Wang

National University of Kaohsiung, Taiwan

#### **C03-04, ICICIC-2009-IS33-04**

*Botnet: Survey and Case Study*

Chao Li, Wei Jiang, Xin Zou

Coordination Center of China, China

#### **C03-05, ICICIC-2009-IS33-05**

*Automatic Image Annotation Using GHSOM*

Hsin-Chang Yang, Chung-Hong Lee, and Chih-Hsiang Chuang

National University of Kaohsiung, Taiwan

#### **C03-06, ICICIC-2009-1289**

*Automatic Detection of Lung Nodules in Temporal Subtraction Image by Use of Shape and Density Features*

Noriaki Miyake, Hyungseop Kim, Yoshinori Itai, Joo Kooi Tan, Seiji Ishikawa, and Shigehiko Katsuragawa

Kyushu Institute of Technology, Japan

## **C04**

### ***Intelligent Systems and Applications***

Rey-Chue Hwang, I-Shou University, Taiwan

#### **C04-01, ICICIC-2009-IS24-01**

*A Fuzzy-Based Approach for Smart Building Evacuation Modeling*

Chih-Yung Chen

Shu-Te University, Taiwan

#### **C04-02, ICICIC-2009-IS24-02**

*Quality Identification of the Riveting Process by Using Neural Network*

Hsing-Ling Wang, Pin-Hsuin Weng, Chi-Huang Chiang, and Rey-Chue Hwang

I-Shou University, Taiwan

#### **C04-03, ICICIC-2009-IS24-03**

*An AI Estimator of Electric Contract Capacity for CATV System Based on QNN Model*

Jen-Pin Yang, Yu-Ju Chen, Chuo-Yean Chang, Huang-Chu Huang, Sung-Ning Tsai, and Rey-Chue Hwang

I-Shou University, Taiwan

#### **C04-04, ICICIC-2009-IS24-04**

*Short Term Power Load Forecasting by Using Neural Models*

Huang-Chi Chen, Yi-Ching Lin, Yu-Ju Chen, Chuo-Yean Chang, Huang-Chu Huang, and Rey-Chue Hwang

I-Shou University, Taiwan

#### **C04-05, ICICIC-2009-IS24-05**

*The Neural Network Estimator for Mechanical Property of Rolled Steel Bar*

Chih-Chien Huang, Ying-Tsung Chen, Yu-Ju Chen, Chuo-Yean Chang, Huang-Chu Huang, and Rey-Chue Hwang

I-Shou University, Taiwan

#### **C04-06, ICICIC-2009-IS24-06**

*A Polyaniline/ $WO_3$  Nanocomposite Layer based Surface Acoustic Wave  $NO_2$  Gas Sensors*

Chi-Yen Shen, Yung-Hsi Cheng, Shih-Han Wang, Shih-Hao Kuo, and Cheng-Liang Hsu

I-Shou University, Taiwan

## **C05**

### ***Cross-discipline Techniques (VII)***

Mong-Fong Horng, National Kaohsiung University of Applied Sciences, Taiwan

Minghua Pu, Southwest Jiaotong University, China

Hunton Lin, Cheng Shiu University, Taiwan

### **C05-01, ICICIC-2009-IS35-03**

*All Chemical Solution Deposition Route toward REBCO Coated Conductors*

Yong Zhao

Southwest Jiaotong University, China

### **C05-02, ICICIC-2009-IS35-06**

*Nanostructural Control and Flux Pinning in  $M_gB_2$  Superconductor*

C. H. Cheng

Jilin University, China

### **C05-03, ICICIC-2009-567**

*Flow Based Botnet Detection*

Hsiao-Chung Lin, Chia-Mei Chen, Christos Faloutsos, and Tsuhan Chen

National Sun Yet-sen University, Taiwan

### **C05-04, ICICIC-2009-812**

*A Study of the Different Uses of Colour Channels for Traffic Sign Recognition on Hierarchical Temporal Memory*

Wim J. C. Melis and Michitaka Kameyama

Tohoku University, Japan

### **C05-05, ICICIC-2009-1638**

*A DNA Encoding Method to Determine and Sequence All Cliques in a Weighted Graph*

Ikno Kim, Junzo Watada, Jui-Yu Wu

Waseda University, Japan

### **C05-06, ICICIC-2009-2017**

*Application of Neural Network Model to Evaluate Hydro-Geological Parameters*

Chih-Yung Horng and Cheng-Haw Lee

## **C06**

### ***Intellectual Systems and Interfaces (II)***

Xiangshi Ren, Kochi University of Technology, Japan

Jien Kato, Nagoya University, Japan

#### **C06-01, ICICIC-2009-IS36-06**

*Ontology Matching Approach Based on Multi-Strategies Combined*

Feng Yang, Yanhua Gao, and Lei Liu

Jilin University, China

#### **C06-02, ICICIC-2009-IS36-07**

*An Iris Recognition based on GHM Multi-wavelet Transformation*

Yuanning Liu, Fei He, Yonghua Zhao, and Ning Wang

Jilin University, China

#### **C06-03, ICICIC-2009-IS36-08**

*Heuristics Propositional Extension Rule Method*

Xia Wu, Haihong Yu, and Ying Li

Jilin University, China

#### **C06-04, ICICIC-2009-IS36-10**

*An Evaluation of Thumb Interface for Menu Selection on Mobile Equipment*

Minghui Sun and Xiangshi Ren

Kochi University of Technology, Japan

#### **C06-05, ICICIC-2009-IS36-11**

*Data Preprocessing in SVM-based Keywords Extraction from Scientific Documents*

Chunguo Wu, Maurizio Marchese, Yufei Wang, Mikalai Krapivin, Chaoyong Wang, Xitong Li, and Yanchun Liang

Jilin University, China

#### **C06-06, ICICIC-2009-IS23-01**

*Real-time and Reliable Face Detection in Intersection Monitoring by Integration of Skin Color and Facial Features*

Wu-Chih Hu, Ching-Yu Yang, Deng-Yuan Huang, and Chun-Hsiang Huang

National Penghu University, Taiwan

#### **C06-07, ICICIC-2009-IS23-02**

*Personalized Facial Expression Recognition in Color Image*

Chuan-Yu Chang, Yan-Chiang Huang, and Chi-Lu Yang

National Yunlin University of Science & Technology, Taiwan

**C06-08, ICICIC-2009-IS23-03**

*Facial Expression Recognition Using a Novel Regularized Discriminant Analysis with AdaBoost*

Chien-Cheng Lee, Shin-Sheng Huang, and Cheng-Yuan Shih

Yuan Ze University, Taiwan

**C06-09, ICICIC-2009-IS23-05**

*More Efficient Steganographic Embedding and Capacity-Improvement by Generalized Exploiting Modification Direction Method*

Wen-Chung Kuo, Jiin-Chiou Cheng, and Chun-Cheng Wang

National Formosa University, Taiwan

## **C07**

### ***Motor Electronic and Control Applications (II)***

Cheng-Fu Yang, National University of Kaohsiung, Taiwan

Cheng-Yi Chen, Cheng Shiu University, Taiwan

#### **C07-01, ICICIC-2009-IS28-06**

*Modified Sliding Mode Speed Control of Brushless DC Motor Using Quantized Current Regulator*

Cheng-Yi Chen, Marvin H.-M. Cheng, and Cheng-Fu Yang

Cheng Shiu University, Taiwan

#### **C07-02, ICICIC-2009-IS28-07**

*Wavelets Hybrid Neural Network for Harmonic Sources Recognition with the V-I Characteristics*

Cong-Hui Huang, Chia-Hung Lin, and Ting-Chia Ou

Far East University, Taiwan

#### **C07-03, ICICIC-2009-IS28-08**

*Economic Feasibility of Variable Frequency Driving Pump by Fuzzy Financial Model*

Jen-Nan Sheen

Cheng Shiu University, Taiwan

#### **C07-04, ICICIC-2009-IS28-09**

*Cascade PI Controller Designs for Speed Control of Permanent Magnet Synchronous Motor Drive Using Direct Torque Approach*

Cheng-Yi Chen, C.-H. Hsu, Shiang-Hwua Yu, Cheng-Fu Yang, and Hong-Hsin Huang

Cheng Shiu University, Taiwan

#### **C07-05, ICICIC-2009-IS28-10**

*Restricting Turbine Blade Vibrations by a Series Compensation Capacitor*

Jong-Ian Tsai and Ta-Peng Tsao

Kao Yuan University, Taiwan

#### **C07-06, ICICIC-2009-1799**

*Point-by-point analysis of Digit Speckle Image in Frequency Domain Based on Matlab*

Changjun He, Huijian Li, Wei Yu, Xi Liang, and Haiyan Peng

Yanshan University, China

#### **C07-07, ICICIC-2009-1822**

*Edge Detection of Smooth Metallic Surface Using Special Random Sampling Method*

Shiqing Ren, Zhong Zhang, Miyake Tetsuo, Hisanaga Fujiwara, and Takashi Imamura

Shenyang Ligong University, China

**C07-08, ICICIC-2009-1945**

*Multi domain Features based Classification of Mammogram Images using SVM and MLP*

M. Arfan Jaffar, Bilal Ahmed, Ayyaz Hussain, Nawazish Naveed, Fauzia Jabeen and Anwar M. Mirza

National University of Computer & Emerging Sciences, Pakistan

**C07-09, ICICIC-2009-1979**

*Adaptive Image Watermarking Optimized for Pre-Specified Fidelity*

Yueh-Hong Chen and Hsiang-Cheh Huang

National University of Kaohsiung, Taiwan

## **C08**

### ***Artificial Intelligence Applications for E-services***

Deng-Yiv Chiu, Chung Hua University, Taiwan

#### **C08-01, ICICIC-2009-WS01-01**

*The Learning Analysis System Integrate with S-P Chart and Rule-Space Model*

Wen-Chih Chang, Tsung-Kai Hsu, Tsung-Pu Lee, and Yen-Ching Huang

Chung-Hua University, Taiwan

#### **C08-02, ICICIC-2009-WS01-02**

*Applying Reinforcement Learning for Game AI in a Tank-Battle Game*

Yung-Ping Fang and I-Hsien Ting

National University of Kaohsiung, Taiwan

#### **C08-03, ICICIC-2009-WS01-04**

*Attacking and Defending Perspective for e-Crime Discussion: A System Dynamics Simulation Approach*

Deng-Yiv Chiu, Tien-Tsun Chung, and Chen-Shu Wang

Chung-Hua University, Taiwan

#### **C08-04, ICICIC-2009-WS01-06**

*An Item Selection Strategy Based on Association Rules and Genetic Algorithms*

Ming-Hsiung Ying, Shao-Hsuan Huang, and Luen-Ruei Wu

Chung-Hua University, Taiwan

#### **C08-05, ICICIC-2009-WS01-07**

*Integrating IRT to Clustering Student's Ability with K-Means*

Wen-Chih Chang, Sheng-Lin Chen, Mao-Fan Li, and Jui-Yu Chiu

Chung Hua University, Taiwan

#### **C08-06, ICICIC-2009-WS01-08**

*Cost Estimation of Software Project Development by Using Case-Based Reasoning Technology with Clustering Index Mechanism*

Zheng-Wei Huang

Yuanta Security Co. LTD., Taiwan

#### **C08-07, ICICIC-2009-WS01-09**

*Exploring Seasonality Effect of Multinational Stock Dynamism with Support Vector Regression and Artificial Intelligence Approach*

Deng-Yiv Chiu and Cheng-Yi Shiu

Chung-Hua University, Taiwan

**C08-08, ICICIC-2009-922**

*An Approach of Selecting Right Neighbors for Collaborative Filtering*

Liang Zhang, Bo Xiao, and Jun Guo

**C08-09, ICICIC-2009-2011**

*Anomaly Program Behavior Detection Based on Neural Network*

Dingyi Fang, Xiaojiang Chen, Zhangyong Tang, Feng Chen

## **C09**

### ***Mathematical Modeling and Control Systems***

Kai-chao Yao, National Changhua University of Education, Taiwan

Der-fa Chen, National Changhua University of Education, Taiwan

Jui-Fang Chang, National Kaohsiung University of Applied Sciences, Taiwan

### **C09-01, ICICIC-2009-IS17-01**

*Multi-Function Electro-Cardiogram Measurement System Design and Implementation*

Kai-chao Yao, Der-fa Chen, and Fu-chiuan Tsai

National Chang-hua University of Education, Taiwan

### **C09-02, ICICIC-2009-IS17-02**

*Sequential Three-Phase Power Flow Calculation for Radial Distribution Systems via Three-Phase Z-Bus Distribution Factor*

Wei-Tzer Huang and Shiuan-Tai Chen

Chienkuo Technology University, Taiwan

### **C09-03, ICICIC-2009-IS17-04**

*A GA-Based Multiresolution Feature Selection for Ultrasonic Liver Tissue Characterization*

Cheng-Chi Wu, Wen-Li Lee, Yung-Chang Chen, and Kai-Sheng Hsieh

Ming Chuan University, Taiwan

### **C09-04, ICICIC-2009-IS20-01**

*Parameter Selection of Support Vector Regression Based on a Novel Chaotic Immune Algorithm*

Juexin Wang, Yan Wang, Chen Zhang, Wei Du, Chunguang Zhou, and Yanchun Liang

Jilin University, China

### **C09-05, ICICIC-2009-IS20-02**

*Intelligent Components in Knowware System*

Sio-Long Lo and Liya Ding

Macau University of Science and Technology, Macau

### **C09-06, ICICIC-2009-IS20-05**

*Forecasting Exchange Rates using Integration of Particle Swarm Optimization and Neural Networks*

Jui-Fang Chang, Cheung-Wen Chang, and Wen-Yan Tzeng

National Kaohsiung University of Applied Sciences, Taiwan

### **C09-07, ICICIC-2009-229**

FLOATING POINT IMPLEMENTATION OF FFT USING A NOVEL ESL DESIGN FLOW

Yibin Li and Vassilios Chouliaras  
Loughborough University, UK

**C09-08, ICICIC-2009-210**

*Effects of Temperature and Pressure Information in a Hybrid (Fourier Series / Neural Networks)  
Solar Radiation Model*

Mehmet Fidan, Fatih Onur Hocaoglu, and Ömer Nezih Gerek  
Anadolu University, Turkey

## **C10**

### ***Natural Language Processing and Ontology Engineering***

Zhifang Sui, Peking University, China

Yao Liu, Institute of Scientific and Technical Information of China, China

#### **C10-01, ICICIC-2009-IS21-01**

*Computing Word Similarity on Large-scale Corpus*

Tao Xu, Weiguang Qu, Xuri Tang, Dexin Ding, Bing Li, and Hui Li

Nanjing Normal University, China

#### **C10-02, ICICIC-2009-IS21-02**

*Inducting Concept Hierarchies from Text based on FCA*

Zhifang Sui, Qingliang Zhao, and Yao Liu

Peking University, China

#### **C10-03, ICICIC-2009-IS21-03**

*Document Clustering Description Based on Combination Strategy*

Chengzhi Zhang

Institute of Scientific & Technical Information of China, China

#### **C10-04, ICICIC-2009-IS21-04**

*Using Multiple Hybrid Strategies to Extract Chinese Synonyms from Encyclopedia Resource*

Yong Lu, Chengzhi Zhang, and Hanqing Hou

Nanjing University of Information Science & Technology, China;

#### **C10-05, ICICIC-2009-IS21-06**

*Designing and Realizing of Database System of Chinese Medicine Ancient Literature*

Yao Liu, XueFei Chen, Yang Zhou, and Zhen-guo Wang

Institute of Scientific and Technical Information of China, China

#### **C10-06, ICICIC-2009-IS21-07**

*Chinese Verb's Subcategorization Frame Acquisition from Unreliably Parsed Corpus*

Zhifang Sui and Yao Liu

Peking University, China

#### **C10-07, ICICIC-2009-IS21-08**

*Improving Topic Extraction in Chinese Documents Using Word Sense Disambiguation*

Hongyan Song and Tianfang Yao

Shanghai Jiao Tong University, China

**C10-08, ICICIC-2009-1827**

*T-S Fuzzy Control of Magnetic Levitation Systems Using PSO and QEA*

Gwo-Ruey Yu and Yu-Jie Huang

National Ilan University, Taiwan

**C10-09, ICICIC-2009-1964**

*A Web Text Fuzzy Classification Algorithm on Fuzzy Comprehensive Weighted Evaluation Reasoning*

Shiqun Yin, Bing Wan, Yuhui Qiu, and Weiling Chen

Southwest University, China

## **C11**

### ***E-commerce and Logistics Management***

Xiangpei Hu, Dalian University of Technology, China

#### **C11-01, ICICIC-2009-IS11-01**

*A Parallel Immune Algorithm Based on Fine-grained Model with GPU-Acceleration*

Jianming Li, Lihua Zhang, and Linlin Liu

Dalian University of Technology, China

#### **C11-02, ICICIC-2009-IS11-02**

*Dynamic Information Game Theory Analysis of Knowledge Sharing for Training Inside Enterprises under the Mode of Master-apprentice*

Mingzheng Wang, Jinchao Zhang, and Wentli Li

Dalian University of Technology, China

#### **C11-03, ICICIC-2009-IS11-05**

*A Model and an Improved Genetic Algorithm for the Vehicle Routing Problem with Break-down Vehicles*

Xuping Wang, Xu Wu, Zheng Wang, and Xianpei Hu

Dalian University of Technology, China

#### **C11-04, ICICIC-2009-IS11-06**

*Quality Control of Meat Supply Chain Based on Iris Recognition*

Shengnan Sun, Lindu Zhao, Qiang Kong, and Xiaoqiang Wang

Southeast University, China

#### **C11-05, ICICIC-2009-IS11-07**

*A Real-Time Vehicle Routing Method with Diversion for Immediate Requests*

Yan Fang, Xiangpei Hu, Mudan Bai, and Wenjuan Wang

Dalian University of Technology, China

#### **C11-06, ICICIC-2009-IS11-09**

*Safety Control of Meat Supply Chain: A Case Study of SUTAI Pigs*

Qiang Kong, Lindu Zhao, Shengnan Sun, Xiaoqiang Wang, and Menglu Zhang

Southeast University, China

#### **C11-07, ICICIC-2009-IS11-10**

*A Simulation Study of Dynamic Campus Bus Routing with Vehicle Diversion*

Wenjuan Wang, Xiangpei Hu, Lirong Wu, and Yan Fang

Dalian University of Technology, China

**C11-08, ICICIC-2009-IS11-11**

*Inverse Optimization for Resources Allocation of Information Services in IMC*

Yunfu Huo, Lin Ma, Xiangbin Zhang, and Ping Liang

Dalian University, China

**C11-09, ICICIC-2009-IS11-12**

*Benefit Share Mechanism in Small Retail Enterprises Common Logistics Based on Shapley Value*

Fuhua Huang, Min Zhou, and Yangxiaoxun Ou

Hunan University of Commerce, China

## **C12**

### ***Network Security and Network Algorithms***

Chun-Hua Chen, Chienkuo Technology University, Taiwan

#### **C12-01, ICICIC-2009-IS27-01**

*Cryptanalysis of a secure dynamic ID based remote user authentication scheme for multi-server environment*

Te-Yu Chen, Min-Shiang Hwang, Cheng-Chi Lee, and Jinn-Ke Jan  
National Chung Hsing University, Taiwan

#### **C12-02, ICICIC-2009-IS27-02**

*Timestamped Conjunctive Keyword-Searchable Public Key Encryption*

Yu-Chi Chen and Gwoboa Horng  
National Chung Hsing University, Taiwan

#### **C12-03, ICICIC-2009-IS27-03**

*Improvement of an Efficient Proxy Blind Signature Scheme*

Fuw-Yi Yang and Zhen-Wei Liu

#### **C12-04, ICICIC-2009-IS27-05**

*Private Information Retrieval Scheme Combined with E-Payment in Querying Valuable Information*

Chun-Hua Chen and Chao-Hsing Hsu  
National Chung-Hsing University, Taiwan

#### **C12-05, ICICIC-2009-371**

*A Classified Herbs Method and Searching Algorithm of Classification Tree Used for Mathematical Measurement of Effect*

Quanquan Gao, Tingge Ren, Xiaofeng Liu, Ping Gao, Fan Zhang, Yan Sun, Erqun Tang, and Yongyi Chen  
Academy of Math. & Systems, Chinese Academy of Sciences, China

#### **C12-06, ICICIC-2009-666**

*Applying genetic algorithm to on-line updated PID neural network controllers for ball and plate system*

Xiucheng Dong, Zhang Zhang, and Chao Chen  
Xihua University, China

#### **C12-08, ICICIC-2009-1745**

*A Robust Grid-based Key Predistribution Scheme for Sensor Networks*

Yen-Hua Liao, Chin-Laung Lei, and Ai-Nung Wang

National Taiwan University, China

**C12-09, ICICIC-2009-2002**

*E-mail Spam Filtering Using Support Vector Machines with Selection of Kernel Function Parameters*

Tsan-Ying Yu and Wei-Chih Hsu

National Kaohsiung First University of Science and Technology, Taiwan

## **C13**

### ***Intelligent Video Processing***

Chao-Ho (Thou-Ho) Chen, National Kaohsiung University of Applied Sciences, Taiwan

#### **C13-01, ICICIC-2009-IS08-01**

*Adaptive Skin Color Model Switching for Face Tracking under Varying Illumination*

Deng-Yuan Huang, Wu-Chih Hu, and Mao-Hsiang Hsu

Da-Yeh University, Taiwan

#### **C13-02, ICICIC-2009-IS08-02**

*Efficient Bit-Plane Coding Scheme for EBCOT Algorithm in JPEG2000*

Tsung-Han Tsai, Che-Wei Chang, and Chih-Lun Fang

National Central University, Taiwan

#### **C13-03, ICICIC-2009-IS08-03**

*Real-Time Video Stabilization Based on Motion Compensation*

Chao-Ho (Thou-Ho) Chen, Yi-Li Kuo, Tsong-Yi Chen, and Jie-Ru Chen

National Kaohsiung University of Applied Sciences, Taiwan

#### **C13-04, ICICIC-2009-IS08-04**

*People Recognition for Entering & Leaving a Video Surveillance Area*

Da-Jinn Wang, Chao-Ho (Thou-Ho) Chen, Tsong-Yi Chen, and Chien-Tsung Lee

National Kaohsiung University of Applied Sciences, Taiwan

#### **C13-05, ICICIC-2009-IS08-05**

*High-Accuracy Watermarking Scheme on H.264 Based on Majority Voting*

Tsong-Yi Chen, Da-Jinn Wang, Chao-Ho (Thou-Ho) Chen, Guan-Jiun Wang, and John Chern

National Kaohsiung University of Applied Sciences, Taiwan

#### **C13-06, ICICIC-2009-IS08-06**

*Visibility Enhancement in the Foggy Environment Based on Color Analysis*

Da-Jinn Wang, Chao-Ho (Thou-Ho) Chen, Tsong-Yi Chen, and Wen-Wei Tsai

National Kaohsiung Marine University, Taiwan

#### **C13-07, ICICIC-2009-1284**

*An Unsupervised Playfield Segmentation for Various Sport Videos*

Mao-Hsiung Hung, Chaur-Heh Hsieh, and Chung-Ming Kuo

I-Shou University, Taiwan

#### **C13-08, ICICIC-2009-1341**

*Partial Boundary Matching Algorithm and Spatio-Temporal Texture Synthesis in Distributed Video Coding*

Ted Chih-Wei Lei and Shiunn-Jang Chern

National Sun Yat-Sen University, Taiwan

**C13-09, ICICIC-2009-1765**

*A Novel Video Watermarking Scheme in H.264/AVC Encoder*

Shinfeng D. Lin, Chih-Yao Chuang, Mei-Juan Chen, and Hsiang-Cheng Meng

National Dong Hwa University, Taiwan

## **C14**

### ***Innovative Computing Methods in Finance and Management***

Chunhui Xu, Chiba Institute of Technology, Japan

Min Huang, Northeastern University, China

#### **C14-01, ICICIC-2009-IS22-01**

*Numerical Computation for Identifying Nash Equilibria using Shapley's Labeling Method*

Naoki Shiba

Nihon University, Japan

#### **C14-02, ICICIC-2009-IS22-02**

*Particle Swarm Optimization Based Multi-strategies Risk Programming for Virtual Enterprise*

Min Huang, Yifei Liu, Xuejing Wu, and Xingwei Wang

Northeastern University, China

#### **C14-03, ICICIC-2009-IS22-03**

*Multi-Agent Simulation of Fund Circulation in an Artificial Economic System Involving Self-Adjusting Mechanism of Price, Production and Investment*

Shigeaki Ogibayashi and Kousei Takashima

Chiba Institute of Technology, Japan

#### **C14-04, ICICIC-2009-IS22-04**

*An Intelligent Static Traffic Grooming Scheme in IP over DWDM Internet*

Xingwei Wang, Chengcheng Tong, and Min Huang

Northeastern University, China

#### **C14-05, ICICIC-2009-IS22-06**

*VaR Based Assets Portfolio Optimization Model with Risk Measure*

Pingping Lin, Qing Wang, and Shu-an Liu

Northeastern University, China

#### **C14-06, ICICIC-2009-IS22-07**

*Design Life Insurance Participating Policies with Annual Premiums Using Optimization Techniques*

Perla Rocio Calidonio Aguilar and Chunhui Xu

Chiba Institute of Technology, Japan

#### **C14-07, ICICIC-2009-1379**

*An Integrated Concept Diagnosis based on Polytomous IRS and Learning Styles with Application in Fraction Subtraction Assessment*

Yuan-Hong Lin, and Sen-Chi Yu

Taichung University, Taiwan

**C14-08, ICICIC-2009-1770**

*A classification approach of news web pages from multi-media sources at Chinese entry website-Taiwan Yahoo! as an example*

Deng-Yiv Chiu, Chi-Chung Lee, and Ya-Chen Pan

Chung Hua University, Taiwan

**C14-09, ICICIC-2009-1404**

*Dynamic Load Balancing Algorithm Based on FCFS*

Wenzheng Li and Hongyan Shi

Beijing Technology and Business University, China

**C14-10, ICICIC-2009-IS22-05**

*Complexity on the Solution of Multilevel Lot-sizing Problems*

Ikou Kaku

Akita Prefectural University, Japan

## **P01**

### ***Poster Session***

#### **P01-01, ICICIC-2009-2013**

*Feature Selection for Character Recognition Using Genetic Algorithm*

Yoshimasa Kimura, Akira Suzuki, and Kazumi Odaka

#### **P01-02, ICICIC-2009-2016**

*Data Leak Analysis in A Corporate Environment*

Seokhee Lee, Keungi Lee, Antonio Savoldi, and Sangjin Lee

Gwangju Institute of Science and Technology (GIST), Korea

#### **P01-03, ICICIC-2009-380**

*An Outlier Mining Algorithm in High-Dimension based on Single-parameter-k Local Density*

WeiLi Huang, Di Wu, and JiaDong Ren

Hebei University of Engineering, China

#### **P01-04, ICICIC-2009-394**

*The Research on CMAC Network Model Based on Rough Sets for Flatness Control*

Haitao He, Na Zhao, and Liu Yao

Beijing University of Technology, China

#### **P01-05, ICICIC-2009-421**

*The Research on RBF Flatness Forecasting Model Based on MPSO*

Haitao He, Xicai Xue, and Liu Yao

Beijing University of Technology, China

#### **P01-06, ICICIC-2009-1436**

*A Hierarchical Clustering Algorithm Based on K-Means with Constraints*

GuoYan Hang, DongMei Zhang, JiaDong Ren, and ChangZhen Hu

Yanshan University, China

#### **P01-07, ICICIC-2009-1187**

*CABGD: An improved clustering algorithm based on grid-density*

JiaDong Ren, Lili Meng, and Changzhen Hu

Yanshan University&Beijing Institute of Technology, China

#### **P01-08, ICICIC-2009-184**

*A Weighted Subspace Clustering Algorithm in High-Dimensional Data Streams*

JiaDong Ren, Lining Li, and Changzhen Hu

Yanshan University&Beijing Institute of Technology, China

**P01-09, ICICIC-2009-1305**

*An Improved Storage Algorithm for Multidimensional Data Cube*

Haitao He, Yanpeng Zhang, Jiadong Ren, Lining Li, and ChangZhen Hu

Yanshan University, China

**P01-10, ICICIC-2009-539**

*A New Method of System Reliability Evaluation Based on the Fuzzy Theory*

Jungang Zhou, Lingling Li, Zhigang Li, and Quanming Zhao

Hebei University of Technology, China

**P01-11, ICICIC-2009-902**

*Fault Detection of Networked Control Systems Subject to Uncertain Time-varying Delay and Packet Dropout*

Yiming Wan, Hao Ye, and Yongqiang Wang

Tsinghua University, China

**P01-12, ICICIC-2009-1733**

*A Synthesis Approach of Constrained Robust Model Predictive Control*

Junling Li

Shanghai Institute of Technology, China

**P01-13, ICICIC-2009-IS26-01**

*A Novel MDC Framework Based on Orientation SFQ Algorithm*

Lin-Lin Tang and Zhe-Ming Lu

Zhejiang University, China

**P01-14, ICICIC-2009-IS26-02**

*A Novel Real-Time Information Hiding Technique in the VLC Domain*

Hao-Xian Wang and Zhuo-Zhi Diao

Harbin Institute of Technology at Weihai, China

**P01-15, ICICIC-2009-326**

*An Investigation of Four-Phase Flat-type TFPM and Control System*

Huan Wang, Yi-kai Shi, and Bo Tang and Xiao-qing Yuan

Northwestern Polytechnical University, China

**P01-16, ICICIC-2009-IS21-05**

*Active Learning for Chinese Word Sense Disambiguation*

Peng Jin, Yunfang Wu, Zuxu Dai, and Yi Liu  
Leshan Normal University, China

**P01-17, ICICIC-2009-833**

*Efficient parallel algorithms for constructing a  $(k, l)$ -center and a  $(k, l)$ -core in a tree network*

Yan Wang and Yongqiang Wang

Northwest A & F University, China

**P01-18, ICICIC-2009-IS18-01**

*Fault Identification and Fault-Tolerant Control for Nonlinear Systems Based on Fuzzy T-S Model*

Wei Wang, Shaocheng Tong, and Yang Yu

Liaoning University of Technology, China

**P01-19, ICICIC-2009-IS18-02**

*Fuzzy Optimal Control for Operation of the Raw Slurry Blending Process*

Rui Bai, Shaocheng Tong, Jian Zhang, and Chunxia Wang

Liaoning University of Technology, China

**P01-20, ICICIC-2009-IS18-03**

*Image Processing Based on Fuzzy Cellular Automata Model*

Hong Wang, Junna Jiang, Lihui Zhou, and Liping Du

Hebei Polytechnic University, China

**P01-21, ICICIC-2009-IS18-04**

*A New Method for License Plate Location Based on Top-hat Transform and Wavelet Transform*

Wenju Li, Zhengqiang Zhu, and Zhouen Jiang

Liaoning Normal University, China

**P01-22, ICICIC-2009-IS18-05**

*An Improved Fuzzy Reasoning Algorithm Based on TSK Model*

Tao Wang, Yihui Tian, and Yang Chen

Liaoning University of Technology, China

**P01-23, ICICIC-2009-IS18-06**

*A New Method of Fuzzy Interpolative Reasoning Based on Gaussian-type Membership Function*

Tao Wang, Hao Qian, and Yang Chen

Liaoning University of Technology, China

**P01-24, ICICIC-2009-IS18-07**

*Parameters Extraction for Fuzzy Modeling of Nonlinear System*

Jian Zhang, Rui Bai, and Hehui Lan  
Liaoning University of Technology, China

**P01-25, ICICIC-2009-IS18-08**

*Research on Hierarchical Fuzzy Wavelet Neural Network Control Algorithm in Urban Traffic Trunk*

Hai-shuang Guan and Wen-ge Ma  
Beihua University, China

**P01-26, ICICIC-2009-IS18-09**

*Research on Traffic Flow Fuzzy Time Series Forecasting Algorithm of Single Intersection*

Wen-ge Ma and Yan Yan  
Liaoning University of Technology, China

**P01-27, ICICIC-2009-IS18-10**

*Robust Control for a Class of Uncertain Networked Switching Fuzzy Systems*

Baochun Lu, Baoguo Li, Yi Liu, and Yan Wu  
Liaoning University of Technology, China

**P01-28, ICICIC-2009-IS18-11**

*Switching Robust  $H^\infty$  Control for a Class of Uncertain Fuzzy Systems*

Yi Liu, Jun Zhao, and Li Ying Sun  
Liaoning University of Technology, China

**P01-29, ICICIC-2009-IS18-12**

*The Improved VQ Algorithm for Speaker Recognition*

ChunBao Huo, Yan Shao, and XuGuang Gao  
Liaoning University of Technology, China

**P01-30, ICICIC-2009-445**

*Automatic Position Annotation of Brain CT Axial Slice for Content-based image retrieval*

Kehong Yuan, Zhen Tian, and Jiying Zou  
Tsinghua University, China

**P01-31, ICICIC-2009-930**

*Classification Method of Jsteg Stego-images and F5 Stego-images*

Qian Zhang, Yuan Liu, Shijie Zhang, and Ke Chen  
Information Science and Technology Institute, China

**P01-32, ICICIC-2009-1932**

*An Analysis of ECG Beats by Using the Mahalanobis Distance Method*

Yun-Chi Yeh  
Ching Yun University, Taiwan

**P01-33, ICICIC-2009-696**

*The Research of Optimization Model Based on Airplane Seating Problem*

Yuhuan Cui, Jingguo Qu, Aimin Yang, and Baofeng Li  
Hebei Polytechnic University, China

**P01-34, ICICIC-2009-726**

*The equipment renewal problem based on dynamic programming*

Baofeng Li, Xiaohui Hao, Jingguo Qu, Yuhuan Cui, and Dianxuan Gong  
Tangshan Teacher College, China

**P01-35, ICICIC-2009-IS36-09**

*MAX-MIN Ant System on GPU with CUDA*

Hongtao Bai, Dantong OuYang, Ximing Li, Lili He, and Haihong Yu  
Jilin University, China

**P01-36, ICICIC-2009-1491**

*Design and Evaluation of a Graphical Password Scheme*

Haichang Gao, Xiyang Liu, Sidong Wang, Honggang Liu, and Ruyi Dai  
Xidian University, China

**P01-37, ICICIC-2009-987**

*Ranking fuzzy numbers with quasi-mean and fuzzy degree*

Guixiang Wang, Xinni Gao, and Yunping Wen  
Hangzhou Dianzi University, China

**P01-38, ICICIC-2009-464**

*Image Inpainting Using Curvature-Driven Diffusions Based on P-Laplace Operator*

Suli Li and Huiqin Wang  
College of Science, Donghua University, China

**P01-39, ICICIC-2009-IS16-04**

*Chaos Particle Swarm Optimization Algorithm for Estimating Solute Transport Parameters of Streams from Tracer Experiment Data*

Jian-Qing Guo, Hong-Fei Zhou, and Ling-Qun Meng  
Chang'an University, China

**P01-40, ICICIC-2009-933**

*Parity Space-Based Fault Detection for Linear Time-Varying Systems with Multiple Packet Dropouts*

Yueyang Li and Maiying Zhong  
Shandong University, China

**P01-41, ICICIC-2009-527**

*English Location Entity Recognition Based on Conditional Random Fields*

Xiaolong Guo, Yuncheng Du, Xueqiang Lv, Shuicai Shi  
North China Electric Power University, China

**P01-42, ICICIC-2009-573**

*An Improved Image Encryption Algorithm Based on Hyper-chaos*

Tiegang Gao, Qiaolun Gu, Zengqiang Chen, and Renhong Cheng  
Nankai University, China

**P01-43, ICICIC-2009-556**

*Method of Lane -changing Track Access Based on Video*

Bohang LIU, Qingbing LI, Shuang WU, and Xiaoning WANG  
Harbin Institute of Technology, China

**P01-44, ICICIC-2009-1123**

*Dead Reckoning Based Rendering of 3D Cloud for Shiphandling Simulator*

Helong Shen, Yong Yin, Yongjin Li, and Xinyu Zhang  
Dalian Maritime University, China

**P01-45, ICICIC-2009-IS11-03**

*A Location Model of Collector in a Multi-commodity Flow Supply Chain*

Ruo-hong Zhou and Wei Liu  
Dalian Maritime University, china

**P01-46, ICICIC-2009-559**

*A Least-squares Algorithm for Maneuvering Targets in HF Radar*

Jun Tang, Chengyu Hou, and Yiyang Shen  
Bei Hang University, China

**P01-47, ICICIC-2009-552**

*Design of Automation Control System for Water Chillers*

Yuhong Sun, Yuying Sun, Junmei Li, and Xiaowei Yin  
Computer Science College QuFu Normal University, China

**P01-48, ICICIC-2009-1857**

*A Fuzzy MCDM Partnership Selection Model – Case of The IC Design House*

Jia-Jane Shuai

Ming hsin University of Science and Technology, Taiwan

**P01-49, ICICIC-2009-1656**

*Research and Implementation of a 3D Meteorology Monitoring System*

Weihong Wang and Feixia Mo

Zhejiang University of Technology, China

**P01-50, ICICIC-2009-1836**

*Research on Anti-Control of Missile Electro-Hydraulic Actuator Using Active Disturbance Rejection Control Method*

Hui Chen, Xiaoye Qi, Juan Chen, and Yongling Fu

BeiHang University, China

**P01-51, ICICIC-2009-777**

*Application of Fuzzy Control with PID in Plastics Temperature Control of Hollow Molding Machine*

Zhenhua Zhao, Jingsong Zeng and Wei Zhou

Wuhan institute of Technology, China

**P01-52, ICICIC-2009-IS27-04**

*Research and Development of Internet Teacher Teaching Evaluation System*

Ming Ching Ho

ChienKuo Technology University, Taiwan

**P01-53, ICICIC-2009-IS09-04**

*Super-fast Image Data Retrieval Method Based on Hash Algorithm*

Li-chen Gu Ying Chen, and Xiao-le Yan

Southeast University , China

**P01-54, ICICIC-2009-302**

*Robust synchronization of the hyperchaotic MCK system subject to uncertainties*

wei xiang and Fangqi chen

Nanjing University of Aeronautics and Astronautics, China

**P01-55, ICICIC-2009-1691**

*Robust Stability of Discrete-time Stochastic Neural Networks with Markovian Jumping Parameters and Mode-dependent Delays*

Jiqing Qiu and Haikuo He

Hebei University of Science and Technology, China

**P01-56, ICICIC-2009-626**

*Robust exponential stability for discrete-time uncertain BAM neural networks Markovian jump system with time delays*

Jiqing Qiu and Kunfeng Lu

Hebei University of Science and Technology, China

**P01-57, ICICIC-2009-413**

*Two-Channel Perfect Reconstruction Filter Banks Using Hilbert Transformers*

Chimin Tsai

Chung Hua University, Taiwan

**P01-58, ICICIC-2009-21**

*Comparative Analyses and Experiment Verification on Cockpit Background Sound Characteristic Frequency*

Daolai CHENG, Chuijie YI, Zhiqiang Zhang, Xianbo Xiao, and Hongyu YAO

Shanghai Institute of Technology, China

**P01-59, ICICIC-2009-350**

*Robust Stability and Stabilization of a Class of Uncertain Linear Neutral Systems with Multiple Delays*

Hongguang Zhang

Harbin Institute of Technology, China

**P01-60, ICICIC-2009-823**

*AHU Control Strategies in the VAV System*

Yuying Sun, Zhonglei Zheng, Xun Hou, and Peizhe Tian

Beijing University of Technology, China

**P01-61, ICICIC-2009-853**

*Analyzing Risks Measurement and Transmission of Supply Chain with Retail Price Fluctuation*

Yonghong Li and Lindu Zhao

Southeast University, China

**P01-62, ICICIC-2009-1948**

*Automatic Fatigue Detection of Drivers through Pupil Detection and Yawning Analysis*

Tayyaba Azim, M. Arfan Jaffar, and Anwar Majid Mirza

National University of Computer & Emerging Sciences, Pakistan

**P01-63, ICICIC-2009-192**

*An Evidential Reasoning Approach for Learning Object Recommendation with Uncertainty*

Noppamas Pukkhem and Wiwat Vatanawood

Chulalongkorn University, Thailand

**P01-64, ICICIC-2009-416**

*Financial Structure and Economic Growth: A Nonparametric Assessment*

Yafen Ye and Bing Xu

Zhejiang Gongshang University, China

**P01-65, ICICIC-2009-1430**

*Design and Application of High-precision Temperature and Humidity Control for Automobile Painting Workshop Based on Sub-area Division Strategy*

Chunwang Li, Peizhe Tian, Yimin Wu, and Jun He

Beijing Union University, China

**P01-66, ICICIC-2009-882**

*An Novel Ultra Broadband 8-45 GHz 4-Bit GaAs pHEMT Monolithic Digital Attenuator Used for Gain Control of Transceivers*

Xing Wen, Faxin Yu, and Lingling Sun

Ministry of Education, Hangzhou Dianzi University, China

**P01-67, ICICIC-2009-2010**

*On Leveraging Social Web Sites*

Won Kim and Ok-Ran Jeong

Kyungwon University, Korea

**P01-68, ICICIC-2009-963**

*Warped Filter Banks Used in Noisy Speech Recognition*

Lixia Huang, and Gianpaolo Evangelista

Taiyuan University of Technology, China