

# Conference Schedule

Dec. 12, 2010				
13:00   20:00	Registration and Welcome Reception at hotel The Fourth International Conference on Genetic and Evolutionary Computing			
Dec. 13, 2010				
08:00   09:00	Registration and Welcome Reception at conference-site The Fourth International Conference on Genetic and Evolutionary Computing			
09:00   09:15	Opening Room 104 (in International Conference Hall of Harbin Institute of Technology Shenzhen Graduate School (HITSGS))			
09:20   10:15	Keynote Speech I- Professor Wen-Lian Hsu Room 104 (in International Conference Hall of HITSGS)			
10:15   10:30	Coffee Break Reception Room			
10:30   12:30	Session A01: Intelligent Information Processing for Industrial Applications (10)	Session A02: Systems and Algorithms for Telematics and Network (9)	Session A03: Intelligent Technique and Its Application (9)	Poster Session : P01 (6)
	Room 102	Room 303	Room 304	Room 104
12:30   14:00	Lunch Restaurant in HITSGS			
14:00   15:40	Session A04 : Control System (7)	Session A05 : Signal, Biology and Medical (7)	Session A06: Ubiquitous Security and Pervasive Network (9)	Poster Session : P02 (6)
	Room 102	Room 303	Room 304	Room 104
15:40   16:00	Coffee Break Reception Room			
16:00   17:40	Session A07: Information System and Network Management (8)	Session A08: Intelligent Applications for Home and Medical Treatment (7)	Session A09: Evolutionary Approaches to Management Engineering (7)	Poster Session: P03 (6)
	Room 102	Room 303	Room 304	Room 104
17:40   20:00	Banquet Restaurant in Hotel			

Dec. 14, 2010				
08:00   09:00	<p style="text-align: center;"><b>Keynote Speech II- Professor Ajith Abraham</b> Room 104 (in International Conference Hall of HITSGS)</p>			
09:00   10:00	<p style="text-align: center;"><b>Keynote Speech III - Professor Jianrong Tan</b> Room 104 (in International Conference Hall of HITSGS)</p>			
10:00   10:20	<p style="text-align: center;"><b>Coffee Break</b> Reception Room</p>			
10:20   12:20	Session B01 : Steganography and Watermarking (10)	Session B02: Optimization and Network Security (9)	Session B03: Computational Intelligence for Applications in Engineering (9)	Poster Session: P04 (6)
	Room 102	Room 303	Room 304	Room 104
12:20   14:00	<p style="text-align: center;"><b>Lunch</b> Restaurant in HITSGS</p>			
14:00   15:40	Session B04: Network Control and Application (7)	Session B05 : Intelligent Video Processing (8)	Session B06 : Language Processing, Classification and Mining (9)	Poster Session: P05 (6)
	Room 102	Room 303	Room 304	Room 104
15:40   16:00	<p style="text-align: center;"><b>Coffee Break</b> Reception Room</p>			
16:00   17:40	Session B07 : Genetic Algorithm and Evolutionary Vision (8)	Session B08 : Information Security and Intelligence Control (9)	Session B09 : Network Application, Protocol and Security (9)	Poster Session: P06 (6)
	Room 102	Room 303	Room 304	Room 104
18:30   20:30	<p style="text-align: center;"><b>Banquet</b> Restaurant in Hotel</p>			

Dec. 15, 2010

09:00   10:00	<b>Keynote Speech IV- Professor David Power</b> <b>Room 104 (in International Conference Hall of HITSGS)</b>			
10:00   10:20	<b>Coffee Break</b> <b>Reception Room</b>			
10:20   12:20	<b>Session C01 :</b> <b>Particle Swam</b> <b>Optimization (9)</b>	<b>Session C02 :</b> <b>Intelligent Services and</b> <b>Applications (7)</b>	<b>Session C03 :</b> <b>Intelligent Systems and</b> <b>Applications (8)</b>	<b>Poster Session: P7</b> <b>(6)</b>
	<b>Room 102</b>	<b>Room 303</b>	<b>Room 304</b>	<b>Room 104</b>
12:20   14:00	<b>Lunch</b> <b>Restaurant in HITSGS</b>			



**IEEE**



## The Fourth International Conference on Genetic and Evolutionary Computing

December 13-15, Shenzhen, China

<http://iiirc.hitsz.edu.cn/ICGEC2010/> (Shenzhen)

<http://bit.kuas.edu.tw/~icgec10/> (Taiwan)

# Conference Program

### December 13, 2010

Registration and Welcome Reception-----	08:00-09:00
Opening -----	09:00-09:15
Keynote Speech (I) -----	09:15-10:15
Coffee Break-----	10:15-10:30
Session A01-A03, P1 -----	10:30-12:30
Lunch -----	12:30-14:00
Session A04-A06, P2 -----	14:00-15:40
Coffee Break-----	15:40-16:00
Session A07-A09, P3 -----	16:00-17:40
Dinner -----	18:30-20:30

### December 14, 2010

Keynote Speech (II) -----	08:00-09:00
Keynote Speech (III) -----	09:00-10:00
Coffee Break-----	10:00-10:20
Session B01-B03, P4 -----	10:20-12:20
Lunch -----	12:20-14:00
Session B04-B06, P5 -----	14:00-15:40
Coffee Break-----	15:40-16:00
Session B07-B09, P6 -----	16:00-17:40
Banquet-----	18:30-20:30

### December 15, 2010

Keynote Speech (IV) -----	09:00-10:00
Coffee Break-----	10:00-10:20
Session C01-C03, P7 -----	10:20-12:20
Lunch -----	12:20-14:00

## Session A01: Intelligent Information Processing for Industrial Applications (10)

Session Chairs:

Prof. Jiansheng Qian, Prof. Shiyin Li and Dr. Leida Li, China University of Mining and Technology, China

Prof. Chao-Hsing Hsu, Chienkuo Technology University, Taiwan

- 1) ICGEC-2010-IS09-01 A New MCMC Particle  
Filter:Re-sampling form the Layered Transacting MCMC Algorithm  
Jun Tian, Yu Liang and Jiansheng Qian  
China University of Mining and Technology, China
- 2) ICGEC-2010-IS09-02  
Max-min based Optimal Routing Algorithm for Wireless Sensor Networks  
Yong Ma and Haifeng Jiang  
China University of Mining and Technology, China
- 3) ICGEC-2010-IS09-03  
The Research of Management Algorithm About Radio Resource In Wireless Mesh Network  
Xingge Guo and Chuande Dong  
China University of Mining and Technology, China
- 4) ICGEC-2010-IS09-05  
Unequal Clustering Scheme Based LEACH for Wireless Sensor Networks  
Peng Ren, Jiansheng Qian, Leida Li, Zhikai Zhao and Xiaobin Li
- 5) ICGEC-2010-IS09-06  
A Novel Exemplar-Based Image Completion Scheme with Adaptive TV-Constraint  
Zhaolin Lu, He Huang, Leida Li and Deqiang Cheng  
China University of Mining and Technology, China
- 6) ICGEC-2010-IS09-07  
The Study of Wireless Mesh Network Routing Algorithm Based on Interference Model  
Peipei Zhao and Jiansheng Qian  
China University of Mining and Technology, China
- 7) ICGEC-2010-IS09-08  
Semi-supervised Kernel based Progressive SVM  
Zhikai Zhao, Jiansheng Qian, Jian Cheng and Guihua Wang  
China University of Mining and Technology, China
- 8) ICGEC-2010-IS09-10  
The Research on Distributional Load-Equalization Routing Protocol in Wireless Mesh Network  
Peipei Zhao and Chuande Dong
- 9) ICGEC-2010-380

Projective Point Matching Using Modified Particle Swarm Optimization

Hongpo Liu, Jianrong Chen, Zhiguo Tan and Shuhua Teng

Henan Polytechnic Institute, China

10) ICGEC-2010-IS12-01

Optimizing Beam Pattern of Linear Adaptive Phase Array Antenna Based on Particle Swarm Optimization

Chao-Hsing Hsu, Chun-Hua Chen, Wen-Jye Shyr, Kun-Huang Kuo, Yi-Nung Chung and Tsung-Chih Lin

Chienkuo Technology University, Taiwan

## **Session A02: Systems and Algorithms for Telematics and Network (9)**

### **Session Chairs:**

**Prof. Shi-Huang Chen, Shu-Te University, Taiwan**

**Prof. Tianhua Liu and Dr. Zhenhua Tan, Shenyang Normal University, China**

1) ICGEC-2010-IS13-01

An Integrated Java Platform For Telematics Services

Yu-Lin Chu, Po-Yu Ke, Kun-Fu Tseng, Sing-Mei Lin, Li-Yu Lu and Chin-Yuan Chang  
Shu-Te University, Taiwan

2) ICGEC-2010-IS13-02

An Anonymous Authentication Scheme for Telematics Applications

Chun-Li Lin

Shu-Te University, Taiwan

3) ICGEC-2010-IS13-03

Seamless Layer 2 Framework for Heterogeneous networks

Yu-Chang Chen, Shiang-Chi Tseng and Ya-Bo Hu

Shu-Te University, Taiwan

4) ICGEC-2010-IS13-04

Fixed-Point acceleration of square root and logarithm using quadratic regression for HTK Kernel Modules

Chih-Hung Chou, Po-Chuan Lin and Jhing-Fa Wang

National Cheng Kung University, Taiwan

5) ICGEC-2010-IS13-05

Unsupervised Speaker Clustering Using SVM Training Missclassification Rate for Meeting Short-Duration Speech Signals

Po-Chuan Lin, Yeh-Yi Jui, Tsai-Sung Ying, Yeong-Chin Chen and Menq-Jion Wu

Tung-Fang Design University, Taiwan

6) ICGEC-2010-IS13-06

Fast Macro-block Selection Algorithm Using 2-D Haar Wavelet Features for H.264 Video Codec

Chung-Hsien Chang, Shi-Huang Chen and Jhing-Fa Wang

National Cheng Kung University, Taiwan

7) ICGEC-2010-IS13-07

A Study on Speech Control Interface for Vehicle On-Board Diagnostic System

Shi-Huang Chen, Yu-Ru Wei

Shu-Te University, Taiwan

8) ICGEC-2010-558

Amalgamation of SVM based Classifiers for Prognosis of Breast Cancer Survivability

Amna Ali and Minkoo Kim

Ajou University, South Korea

9) ICGEC-2010-IS01-02

Filtering Based Multiple String Matching Algorithm Combining q-Grams and BNDM

Changsheng Miao, Guiran Chang and Xingwei Wang

Northeastern University, China

### **Session A03: Intelligent Technique and Its Application (9)**

#### **Session Chairs:**

**Prof. Rey-Chue Hwang, I-Shou University, Taiwan**

1) ICGEC-2010-IS11-01

A New Technique for Searching the Global Minimum of Supervised Neural Network

Chih-Chien Huang, Jay Cheng, Yu-Ju Chen, Shang-Jen Chuang, Shuming T. Wang and

Rey-Chue Hwang

I-Shou University, Taiwan

2) ICGEC-2010-IS11-02

System Identification of TP Film Evaporation by Using Nearly Equivalent NN Model

Du-Jou Huang, Chih-Chien Huang, Yu-Ju Chen, Huang-Chu Huang, Shen-Whan Chen and

Rey-Chue Hwang

I-Shou University, Taiwan

3) ICGEC-2010-IS11-03

Transmittance Estimation of TP Decoration Film by QNN

Du-Jou Huang, Jen-Pin Yang, Yu-Ju Chen, Fang-Tsung Liu, Chuo-Yean Chang and Rey-Chue

Hwang

I-Shou University, Taiwan

4) ICGEC-2010-IS11-04

The Detection of Cartilage Oligomeric Matrix Protein Using a Quartz Crystal Microbalance

Chi-Yen Shen, Shih-Han Wang, Ting-Chan Weng and Yu-Fong Huang

I-Shou University, Taiwan

5) ICGEC-2010-IS11-05

DSP based Control of Parallel DC-DC Boost Converters by Adaptive Fuzzy Sliding-Mode Control Scheme

Li-Peng Yin, Chi-Cheng Cheng, Chih-Yung Chen, Ming-Sheng Zheng and En-Chih Chang

National Sun Yat-Sen University, Taiwan

6) ICGEC-2010-665

Towards Creative Case Based Reasoning

Zhiqiang Zhu, Hung-Yao Hsu and Sev Nagalingam

University of South Australia, Australia

7) ICGEC-2010-677

The Operating Transient Process Analysis and Synchronous Switching Strategies Research of Vacuum Breaker

ZHANG Qingjie, YUAN Haiwen, LIU Yingyi and WANG Qiusheng

Beihang University, China

8) ICGEC-2010-294

Iterative Belief Revision in Partial Observable Non-deterministic Planning

Dongning Rao and Zhihua Jiang

Guangdong University of Technology, China

9) ICGEC-2010-611

The Validity of Five-Factor Model of Personality to Predicting Impulse Buying Tendency

Hsien-Lun Wong, Yi-Hsien Tu and Mei-Chun Lin

Business, Minghsin University of Science and Technology, Taiwan

## **Session A04: Control System (9)**

### **Session Chairs:**

**Dr. We-Tzer Huang, Chienkuo Technology University, Taiwan**

**Prof. Kai-chao Yao, National Changhua University of Education, Taiwan**

1) ICGEC-2010-IS02-01

Optimal Planning of a Load Transfer Substation Pair between Two Normally Closed-Loop Feeders Considering Minimization of System Power Losses Using a Genetic Algorithm

Wei-Tzer Huang, Kai-Chao Yao, Shiuan-Tai Chen, Hsiau-Hsian Nien, Deng-Chung Lin and

Po-Tung Huang

Chienkuo Technology University, Taiwan

2) ICGEC-2010-IS02-02

Actuator Design of a New AC PM Contactor with Energy-Saving and Noise-Free Characteristics



- Chih-Yu Hung and Chieh-Tsung Chi  
Chienkuo Technology University, Taiwan
- 3) ICGEC-2010-IS02-03  
Apply GM(0,N) to The Weighting Analysis in Timoshenko Beam System  
Jee-Ray Wang, Der-Wei Chen, Kuan-Ying Lu, Chang-Jhih Hong, Cheng-Chung Chiu and Ping-You Zang  
Chienkuo Technology University, Taiwan
- 4) ICGEC-2010-IS02-04  
Apply Grey System Method in The Influence Factors Weighting Analysis in Kindergarten  
Yuan-Piao Lee, Chu-Sung Shih, Huang-Hong Ding, Yi-Ping Guan, Tien-Yu Chen and Kun-Li Wen
- 5) ICGEC-2010-IS02-06  
Apply Kansei Engineering for Health and Environmental in Meat Selection  
Kuang-Fa Liu, Jee-Ray Wang, Jiam-Hwa Lee, Chi-Mei Wang, Chang-Ray Lin and Ming-Che Liou  
Chienkuo Technology University, Taiwan
- 6) ICGEC-2010-IS02-07  
The Factors Influencing the Contribution of Continuing Education toward Workforces' Professional Development and Human Capital Investment  
Wen Ling-Yu, Chen Li-Chen  
National Changhua University of Education, Taiwan
- 7) ICGEC-2010-IS02-09  
Apply Grey Prediction in the Number of Tourist  
Mei-Lien Kan, Yuan-Bing Lee and Wen-Chuan Chen  
Dahan Institute of Technology, Taiwan
- 8) ICGEC-2010-IS02-10  
Development of Operational Procedures of Distributed Generation Sources in a Micro-Grid  
Wen-Chih Yang and San-Yi Lee  
Technology and Science Institute of Northern Taiwan, Taiwan
- 9) ICGEC-2010-IS02-11  
Optimal Operation Scheme for a Cogeneration System Promoted from an Emergency Standby System Combined with Absorption Chiller  
Shyi-Wen Wang  
Chienkuo Technology University, Taiwan

## **Session A05: Signal, Biology and Medical (7)**

## Session Chairs:

**Prof. Chih-Yu Hsu, Chaoyang University of Technology, Taiwan**

- 1) ICGEC-2010-IS26-01  
Techniques for Automatic Magnetic Resonance Image Classification  
Hsian-Min Chen, Shih-Yu Chen, Jyh Wen Chai, Clayton Chi-Chang Chen, Chao-Cheng Wu, Yen-Chieh Ouyang, Ching Tsorng Tsai, Ching-Wen Yang, San-Kan Lee and Chein-I Chang  
Hungkuang University, Taiwan
- 2) ICGEC-2010-IS26-02  
Volume-based Magnetic Resonance Brain Image Classification  
Yaw-Jiunn Chiou, Jyh-Wen Chai, Clayton Chi-Chang Chen, Shih-Yu Chen, Hsian-Min Chen, Yen-Chieh Ouyang, Wu-Chung Su, Ching Tsorng Tsai, Ching-Wen Yang, San-Kan Lee and Chein-I Chang  
National Chung Hsing University, Taiwan
- 3) ICGEC-2010-IS26-05  
A PSO-SVM Lips Recognition Method Based on Active Basis Model  
Chih-Yu Hsu, Chih-Hung Yang, Yung-Chih Chen, Min-chian Tsai  
Chaoyang University of Technology, Taiwan
- 4) ICGEC-2010-IS26-06  
Precision Constrained Gaussian Model For Online Handwritten Jamo Character Recognition  
Jing Lu, He Ping Liu and Ming Fu Zou  
University of science and technology Beijing, China
- 5) ICGEC-2010-IS26-08  
A Software System for Anisotropic Diffusion Analysis of Diffusion Tensor Images  
Chia-Hao Chang, Chih-Yu Hsu , Yu-Jen Yang and Kuo-Kun Tseng
- 6) ICGEC-2010-IS26-09  
Corner Detection Based on Normal Vector of Boundary Fitting Line  
Zhenyu Meng, Jeng-Shyang Pan, Kuo-Kun Tseng and Chih-Yu Hsu  
Harbin Institute of Technology Shenzhen Graduate School, China
- 7) ICGEC-2010-455  
QRS Complex Detection using Cubic Splines  
Huang-Nan Huang, Shyu-Yu Wu, Shuo-Tsung Chen and Chih-Yu Hsu  
Tunghai University, Taiwan

**Session A06: Ubiquitous Security and Pervasive Network (9)**

## Session Chairs:

Dr. Tsung-Han Lee, National Taichung University, Taiwan

Prof. Zhiyong Zhang and Dr. Ruijuan Zheng, Henan University of Science and Technology, China

- 1) ICGEC-2010-IS27-01  
Supporting Collaborative Interaction with Real Time Force Feedback in Distributed Haptic Virtual Environments over IP Networks  
Kian Meng Yap  
Sunway University College, Malaysia
- 2) ICGEC-2010-IS27-02  
Real-time Bridge Scouring Safety Monitoring System by Using Mobile Wireless Technology  
Yu-Ting Liu, Jian-Hua Tong, Yiching Lin, Tsung-Han Lee and Chia-Feng Chang  
National Chung Hsing University, Taiwan
- 3) ICGEC-2010-IS27-04  
An Energy Efficient Cross-layer Design by Using the Contention Window Optimization Scheme for Ad-hoc Wireless Networks Operating in Errorprone Channel Conditions  
Tsung-Han Lee, Alan Marshall and Bosheng Zhou  
National Taichung University, Taiwan
- 4) ICGEC-2010-IS27-05  
Wireless Security Issues in pervasive computing  
Bosheng Zhou, Alan Marshall and Tsung-Han Lee  
Queen's University Belfast, UK
- 5) ICGEC-2010-IS06-01  
A Novel Usage Control Protocol Model for DRM System  
Kefeng Fan, Subing Zhang and Zhen Yang  
China Electronics Standardization Institute, China
- 6) ICGEC-2010-IS06-03  
Multi-Spectral and Panchromatic Image Fusion Based on Region Correlation Coefficient in Nonsampled Contourlet Transform Domain  
Chuanqi Ye, Xinliang Liu, Zhiyong Zhang and Ping Wang  
Henan University of Science & Technology, China
- 7) ICGEC-2010-IS06-04  
A DRM System Based on PKI  
Lili Zhang, ZhiYong Zhang, Dan Mei Niu, Sen Shen and Chuan Qi Ye  
Henan University of Science & Technology, China
- 8) ICGEC-2010-IS06-08  
A DRM System for Home Network Based on RBAC and License Chain  
Danmei Niu, Zhiyong Zhang and Lili Zhang

Henan University of Science and Technology, China

9) ICGEC-2010-IS06-09

A Extended Role-based Access Controls Model Temporal,Spatial,Workflowed and  
Attributed Role-based Access Controls Model

Guoliang Tang, Feng Yang, Zhiyong Zhang and Jiexin Pu

Henan University of Traditional Chinese Medicine, China

## **Session A07: Information System and Network Management (8)**

### **Session Chairs:**

**Prof. Xue-ying Wang, Shenyang Normal University, China**

1) ICGEC-2010-IS08-01

Classification systems based on Fuzzy Cognitive Maps

Yanli Zhang and Huiyan Liu

ShenYang Normal University, China

2) ICGEC-2010-IS08-02

Influence Factors of Technology Acceptance Model in Mobile Learning

Ying Zhao and Qi Zhu

ShenYang Normal University, China

3) ICGEC-2010-IS08-03

Research on Methods of Integrated Information System Based on the BSP

Shuwei Huang and Xueying Wang

ShenYang Normal University, China

4) ICGEC-2010-IS08-04

The Application of E-Learning to Mental Health Curriculum in the Middle School

Sainan Li

ShenYang Normal University, China

5) ICGEC-2010-IS08-05

The Strategic Study of IT Application Based on Innovation Diffusion Theory

Xinghui Wang and Xiangjun Qi

ShenYang Normal University, China

6) ICGEC-2010-IS08-06

Research on Virtual Reality Based on EON Studio

Fei Wang

ShenYang Normal University, China

7) ICGEC-2010-IS08-07

Research on the Estimating Model of the Stock Market Price Based on the LM-BP Neural  
Network

Feng Li

ShenYang Normal University, China

8) ICGEC-2010-IS08-08

Study on Enterprise Information Resources Planning—ILEA

Xueying Wang

ShenYang Normal University, China

## **Session A08: Intelligent Applications for Home and Medical Treatment (7)**

### **Session Chairs:**

**Prof. Nai-Bin Hsu and Prof. Jen-Chu Liu, Yuanpei University, Taiwan**

1) ICGEC-2010-IS28-01

Reversible Visible Watermarking for Contour Style Logo

Wen-Pinn Fang

Yuanpei University, Taiwan

2) ICGEC-2010-IS28-02

Efficiency Analysis and Improvement of SIP-based Push-to-Talk over Cellular

Ding-Jyh Tsaur and Chia-Lung Liu

Yuanpei University, Taiwan

3) ICGEC-2010-IS28-03

An Efficient Cloud for Wellness Self-management Devices and Services

Pei-Ching Yang, Jung-Hsien Chiang, Jen-Chu Liu, Yi-Lun Wen and Kuo-Yu Chuang

National Cheng Kung University, Taiwan

4) ICGEC-2010-IS28-04

The Routing of Healthcare Applications in MPLS Networks

Nai-Bin Hsu

Yuanpei University, Taiwan

5) ICGEC-2010-IS28-05

A Highly Flexible System for Smart Home Sensor Networks

Jen-Chu Liu, Kuo-Yu Chuang and Cai-Fang Ye

Yuanpei University, Taiwan

6) ICGEC-2010-691

Video-on-Demand with Differentiated QoS based-on Available Bandwidth in IPTV

Yuh-Chung Lin, Chin-Shiuh Shieh, Bin-Yih Liao, Wei-Lun Tseng and Jui-Fang Chang

Tajen University, Taiwan

7) ICGEC-2010-IS08-09

Energy Balancing Multi-path Routing for Wireless Sensor Networks

Ren Peng and Xueying Wang

ShenYang Normal University, China

## **Session A09: Evolutionary Approaches to Management Engineering**

(7)

Session Chairs:

**Prof. Junzo Watada, Waseda University, Japan**

1) ICGEC-2010-IS24-01

Construct Logic Operation Gates of OR and AND with Multiple Enzymes

Chu Yuyi, Juiyu Wu, Junzo Watada, Ikno Kim  
Waseda University, Japan

2) ICGEC-2010-IS24-02

Global Optimization Using Meta-Controlled Boltzmann Machine

Shamshul bahar Yaakob and Junzo Watada  
Waseda University, Japan

3) ICGEC-2010-IS24-03

A Hybrid BPSO Approach for Fuzzy Facility Location Problems with VaR

Shuming Wang and Junzo Watada  
Waseda University, Japan

4) ICGEC-2010-IS24-04

Diagnosis System Based on Rough Sets Analysis

Junzo Watada and Shamshul bahar Yaakob  
Waseda University, Japan

5) ICGEC-2010-650

Fish Migration Optimization Based on the Fishy Biology

Jeng-Shyang Pan, Pei-Wei Tsai and Yu-Bin Liao  
National Kaohsiung University of Applied Sciences, Taiwan

6) ICGEC-2010-615

Parallelized Artificial Bee Colony with Ripple-communication Strategy

Ruhai Luo, Tien-Szu Pan, Pei-Wei Tsai and Jeng-Shyang Pan  
Harbin Institute of Technology Shenzhen Graduate School, China

7) ICGEC-2010-0045

Apply the Ant Feature of Sensation to Calculate the Minimum Value of Function

Chao-Yang Pang, Yan Zhang, Qiong Yang and Ben-Qiong Hu  
Sichuan Normal University, China

## **Session B01 : Steganography and Watermarking (10)**

## Session Chairs:

### Prof. Chin-Feng Lee, Chaoyang University of Technology, Taiwan

- 1) ICGEC-2010-IS21-01  
Encoding Strategies to Improve MFCVQ-based Reversible Data Hiding Scheme  
Cheng-Hsing Yang, Sheng-Chang Wu, Peng-Sheng Kong  
National Pingtung University of Education, Taiwan
- 2) ICGEC-2010-IS21-02  
A fragile watermarking scheme for Image Authentication with Tamper Detection and Localization  
Wei-Chin Ku, Te-Chih Chou, Hsin-Lung Wu and Jen-Chun Chang  
National Taipei University, Taiwan
- 3) ICGEC-2010-IS21-03  
Information Hiding Method Using Sharing Images  
Hao-Kuan Tso and Der-Chyuan Lou  
Taiwan
- 4) ICGEC-2010-IS21-04  
A Reversible Data Embedding Scheme Based on Hash Functions for VQ Index Tables  
Zhi-Hui Wang, Ching-Yun Chang and Pei-Wei Tsai  
Dalian University of Technology, China
- 5) ICGEC-2010-IS21-05  
A Data Hiding Method Using Secret Data Division and Pixel Value Differencing  
Jiun-Jian Liaw, Wen-Sheng Wang and Min-Yen Chiu  
Chaoyang University of Technology, Taiwan
- 6) ICGEC-2010-IS21-06  
Data Hiding Scheme with High Embedding Capacity and Good Visual Quality Based on Edge Detection  
Chin-Feng Lee, Chin-Chen Chang and Pei-Ling Tsoub  
Chaoyang University of Technology, Taiwan
- 7) ICGEC-2010-IS21-07  
Side-match Prediction Scheme in Data Hiding  
Wei-Jen Wang, Cheng-Ta Huang and Shiuh-Jeng Wang  
National Central University, Taiwan
- 8) ICGEC-2010-IS21-08  
Text Categorization by MILO Tree Traversals  
Jau-Ji Shen, Wei-Cheng Huang and Chia-Chuan Wu  
National Chung Hsing University, Taiwan
- 9) ICGEC-2010-IS21-09  
Improving Histogram-based Reversible Data Hiding By Tictactoemidlet Predictions

Cheng-Hsing Yang, Fu-Hau Hsu, Min-Hao Wu and Shiuh-Jeng Wang  
National Pingtung University of Education, Taiwan

10) ICGEC-2010-434

Energy-Proportion Audio Watermarking Scheme in the Wavelet Domain  
Shuo-Tsung Chen and Huang-Nan Huang  
Tunghai University, Taiwan

## **Session B02: Optimization and Network Security (9)**

### **Session Chairs:**

**Dr. Ya-Fen Chang, National Taichung Institute of Technology, Taiwan**

1) ICGEC-2010-470

An optimization on single-crank-double-rocker flapping wing mechanism  
Chaoying Zhou, Xingwei Zhang, Cong Liu and Chao Wang  
Harbin Institute of Technology Shenzhen Graduate School, China

2) ICGEC-2010-592

A Survey of Performance Assessment for Multiobjective Optimizers  
Peng Cheng, Jeng-Shyang Pan, Li Li, Yan Tang and Chunlun Huang  
Southwest University, China

3) ICGEC-2010-582

Two-phase Incremental Clustering Algorithm Based on Immune Response and Ant Colony  
Xianghua Li, Zhengxuan Wang and Shoukang Chen  
Zhuhai College Jilin University, China

4) ICGEC-2010-533

A Fast Two-Stage Dynamic Programming Algorithm for Change-Points Model with  
Application in Speech Signal  
Kuo-Ching Chang, Chui-Liang Chiang and Chung-Bow Lee  
National Chung Hsing University, Taiwan

5) ICGEC-2010-439

Optimization-Based Image Watermarking Scheme in the Wavelet Domain  
Shuo-Tsung Chen, Huang-Nan Huang and Chih-Yu Hsu  
Tunghai University, Taiwan

6) ICGEC-2010-IS15-01

Providing Anonymous Channels and Mutual Authentication for Mobile Communications  
Bo Li, Chin-Chen Chang and Jung-San Lee  
Tongji University, China

7) ICGEC-2010-IS15-02

Real-Time Robust Background Modeling Based on Joint Color and Texture Descriptions



Chih-Yang Lin, Chao-Chin Chang, Wei-Wen Chang, Meng-Hui Chen and Li-Wei Kang  
Asia University, Taiwan

8) ICGEC-2010-IS15-03

A High Payload Data Hiding Scheme for Color Image Based on BTC Compression  
Technique

Yung-Chen Chou and Hon-Hang Chang  
Asia University, Taiwan

9) ICGEC-2010-IS15-04

An Efficient and Flexible Authentication Scheme with User Anonymity for Digital Right  
Management

Jen-Ho Yang, Chih-Cheng Hsueh and Chung-Hsuan Sun  
Kainan University, Taiwan

### **Session B03: Computational Intelligence for Applications in Engineering (9)**

#### **Session Chairs:**

**Prof. Mingyue Ding and A. Prof. Ming Yuchi, Huazhong University of  
Science and Technology, China**

1) ICGEC-2010-IS17-01

Fast Marine Route Planning for UAV Using Improved Sparse A\* Algorithm

Xin Yang, Ming-Yue Ding and Cheng-Ping Zhou

Huazhong University of Science and Technology, China

2) ICGEC-2010-IS17-02

Efficient path planning method based on Genetic Algorithm combining path network

Shidong Li, Mingyue Ding, Chao Cai and Lei Jiang

Hubei University, China

3) ICGEC-2010-IS17-03

Heart Rate Prediction Model based on Physical Activities using Evolutionary Neural Network

Feng Xiao, Yi-min Chen, Ming Yuchi, Ming-yue Ding and Jun Jo

Huazhong University of Science and Technology, China

4) ICGEC-2010-IS17-04

Electrode Localization in 3D Ultrasound Images using 3D Phase Grouping and Randomized  
Hough Transform

Wu Qiu, Mingyue Ding and Ming Yuchi

Huazhong University of Science and Technology, China

5) ICGEC-2010-IS17-05

Quantum Genetic Algorithm for Mobile Robot Path Planning

Yangguang Sun and Mingyue Ding

South-Central University for Nationalities, China

- 6) ICGEC-2010-571  
Continuous CLA-EC  
Sakineh Zanganeh, Mohammad Reza Meybodi and Meisam Hosseini Sedehi  
Islamic Azad University-Baft Branch, Iran
- 7) ICGEC-2010-283  
A Heuristic Genetic Algorithm Based on Schema Replacement for 0-1 knapsack Problem  
Chen Lin  
Yangtze University, China
- 8) ICGEC-2010-48  
Parameter Settings of Genetic Algorithm Based on Multi-Factor Analysis of Variance  
Zhengfeng Cao and ZhiHui Zhang  
Beijing Institute of Petrochemical Technology, China
- 9) ICGEC-2010-290  
RST Invariant Image Watermarking based on Invariant Contents  
Xin-Wei Li, Bao-Long Guo and Long Chen  
Xidian University, China

## **Session B04: Network Control and Application (7)**

**Session Chairs:**

**Prof. Ming Zhao, Yangtze University, China**

- 1) ICGEC-2010-IS29-05  
The Research of Hierarchical Data Fusion based on Three-tiers Wireless Sensor Networks for Urban Real Time Traffic Information Monitoring  
Huaping Yu  
Yangtze University, China
- 2) ICGEC-2010-IS29-07  
Research on Application of Kalman Filtering Algorithm in Wireless LAN Positioning System  
Ming Zhao  
Yangtze University, China
- 3) ICGEC-2010-IS29-08  
Research on Data Prefetching strategy to Support Real-time Transactions Processing in Mobile Learning Environments  
Youfu Du and Ming Zhao  
Yangtze University, China
- 4) ICGEC-2010-IS29-09  
Design and Implementation of Production Environment Monitoring System Based on

GPRS-Internet

Lei Wu and Jie Hu

Yangtze University, China

5) ICGEC-2010-IS29-12

A Study of Image Compression Technique Based on Wavelet Transform

TAN Yan Mei, CAO Hua, TAN Jiang Bo, and LI Wei

Guangxi technological college of machinery and electricity, China

6) ICGEC-2010-IS29-13

Grid Workflow Scheduling with Various QoS Constraints Using SPEA2+

WANG Xiang, XIA Jie-wu, LI Jin-zhong, ZENG Jin-tao, PENG song-song

Jinggangshan University, China

7) ICGEC-2010-566

Integrated GRA with Entropy Method to Evaluate Factors Affecting Baltic Dry Index

Hsien-Lun Wong, Yi-Hsien Tu and Shen-Yi Fan

Business, Minghsin University of Science and Technology, Taiwan

## **Session B05: Intelligent Video Processing (8)**

### **Session Chairs:**

**Prof. Wu-Chih Hu, National Penghu University of Science and Technology, Taiwan**

**Prof. Deng-Yuan Huang, Dayeh University, Taiwan**

1) ICGEC-2010-IS23-01

Automatic Video Object Segmentation with Opacity Estimate

Wu-Chih Hu, Deng-Yuan Huang, Ching-Yu Yang and Jung-Fu Hsu

National Penghu University of Science and Technology, Taiwan

2) ICGEC-2010-IS23-02

Face Detection Based on Feature Analysis and Edge Detection against Skin Color-Like Backgrounds

Deng-Yuan Huang, Ta-Wei Lin, Chun-Ying Ho and Wu-Chih Hu

Dayeh University, Taiwan

3) ICGEC-2010-IS23-03

Markov Random Field Based Background Subtraction Method for Foreground Detection Under Moving Background Scene

Tsung-Han Tsai and Chung-Yuan Lin

National central university, Taiwan

4) ICGEC-2010-IS23-04

Effective Reconstruction of the Message-Pruning Trees in Wireless Sensor Networks

Bing-Hong Liu

- National Kaohsiung University of Applied Sciences, Taiwan
- 5) ICGEC-2010-IS23-08  
A People Counting System Based on Face-Detection  
Tsong-Yi Chen, Chao-Ho Chen, Da-Jinn Wang and Yi-Li Kuo  
National Kaohsiung University of Applied Sciences, Taiwan
  - 6) ICGEC-2010-518  
Low-contrast Edge enhancing Anisotropic Diffusion for Speckle Reduction  
Yongde Zhang and Mingyue Ding  
China Medical University, China
  - 7) ICGEC-2010-583  
A Robust and Discriminative Image Perceptual Hash Algorithm  
Zhen-Kun Wen  
Shenzhen University, China
  - 8) ICGEC-2010-287  
Obstacle detection system for visually impaired people based on stereo vision  
Long Chen, Bao-Long Guo and Wei Sun  
Xidian University, China

## **Session B06: Language Processing, Classification and Mining (9)**

### **Session Chairs:**

**Prof. Yao Liu, Institute of Scientific and Technical Information of China, China**

**Dr. Peng Jin, Leshan Normal University, China**

- 1) ICGEC-2010-IS20-01  
Research on Text Clustering Based on Concept Weight  
Yuqin Li, Xueqiang Lv, Yufang Liu and Shuicai Shi  
Beijing Information Science and Technology University, China
- 2) ICGEC-2010-IS20-02  
An Investigation of Chinese Selectional Preference Based on HowNet  
Bin Li, Xiaohe Chen and Xuri Tang  
Nanjing University, China
- 3) ICGEC-2010-IS20-06  
Polyphonic Word Disambiguation with Machine Learning Approaches  
Jinke Liu, Weiguang Qu, Xuri Tang, Yizhe Zhang and Yuxia Sun  
Nanjing Normal University, China
- 4) ICGEC-2010-IS20-07  
A Knowledge based Method for Chinese Word Sense Induction

Peng Jin, Rui Sun and Yihao Zhang

Leshan Teachers' College, China

5) ICGEC-2010-IS20-08

Minimum Normalized Google Distance for Unsupervised Multilingual Chinese-English Word Sense Disambiguation

Pengyuan Liu, Yongzeng Xue, Shiqi Li and Shui Liu

Beijing Language and Culture University, China

6) ICGEC-2010-IS20-09

Automatic Extraction of Multiword Expressions Combining Statistical and Similarity Approaches

Jian Xu, Jingsong Yu and Huilin Wang

Peking University, China

7) ICGEC-2010-671

Research and Design of Personnel Orientation System in Mine Based on GIS/MIS

Yanli Chai, Dan Li and Yanli Chai

China University of Mining & Technology, China

8) ICGEC-2010-327

Rule-Matching Based Method for RFID Event Processing

Cong Li, Chunkai Zhang and Zhijun Wei

Shenzhen Graduate School Harbin Institute of Technology, China

9) ICGEC-2010-308

Term-frequency based feature Selection methods for Text Categorization

Yan Xu and Lin Chen

Beijing Language and Culture University, China

## **Session B07: Genetic Algorithm and Evolutionary Vision (8)**

### **Session Chairs:**

**Prof. Yongping Zhang, Ningbo University of Technology, China**

1) ICGEC-2010-0039

Apply the Feature of Entropy Convergence of ACO to Short the Runtime of Gene Order

Ben-Qiong Hu, Shi-Peng Wang, Gang Jiang and Chao-Yang Pang

Chengdu University of Technology, China

2) ICGEC-2010-195

Optimization Design of Power Factor Correction Converter Based on Genetic Algorithm

Hai Peng Ren and Ting Zheng

Xi'an University of Technology, China

3) ICGEC-2010-521

An Approach of Obtaining Global and Near-global Optimal Process Plans Based on GA Considering Operations Precedence Constraints  
Guangru Hua, Xiaoliang Fan and Guangru Hua  
North China Electric Power University, China

4) ICGEC-2010-638

Application of interactive multiobjective genetic algorithm in maintenance optimization of bridge decks

Jingmei Bian and Quan Bai

Shenyang University of Chemical Technology, China

5) ICGEC-2010-662

Development of Enhanced Active Shape Model (EASM) for In-Situ Automatic Optical Inspection (AOI)

Liang-Chia Chen, Abraham Mario Tapilouw and Nguyen Van Thai

National Taipei University of Technology, Taiwan

6) ICGEC-2010-175

Multifocus Image Fusion Based on Variational Decomposition in Combination with Reconstruction of Vector Fields

Yongping Zhang, Zhongkun He, Fang Cheng, Liang Ding and Quanmao Mi

Ningbo University of Technology, China

7) ICGEC-2010-IS16-01

Multi-focus Image Fusion Based on Wavelet Coefficients Selection and Reconstruction

Fang Cheng, Yongping Zhang and Jianyan Tian

Taiyuan University of Technology, China

8) ICGEC-2010-IS16-03

A Novel Image Smoothing Algorithm Based on Variational Decomposition

Zhongkun He, Yongping Zhang, Rina Su and Shaojing Fan

Ningbo University of Technology, China

## **Session B08: Information Security and Intelligence Control (9)**

### **Session Chairs:**

**Prof. Wenjiu Liu, Nanjing University of Information Science & Technology, China**

**Prof. Lingfang Sun, Northeast Dianli University, China**

1) ICGEC-2010-IS31-08

Auto-recognizing Letter-word Phrases in Chinese Texts

Zheng Zezhi

Xiamen University, China

- 2) ICGEC-2010-IS31-12  
Application of Remote Sensing Technology in Crop Chilling Injury Monitoring  
Yushu Zhang, Rui Feng, Ruipeng Ji, Pengshi Chen, Shujie Zhang and Jinwen Wu  
Institute of Atmospheric Environment, China
- 3) ICGEC-2010-IS31-14  
Self-Generated-Certificate Digital Signature  
Chen-Huang Wu  
Putian University, China
- 4) ICGEC-2010-IS32-01  
An Introductory Review on Quantum Game Theory  
Wenjie Liu, Jingfa liu, Mengmeng Cui and Ming He  
Nanjing University of Information & Technology, China
- 5) ICGEC-2010-IS32-02  
Land Cover Classification base on Fourier Analysis  
Mengmeng Cui, Shengjun Xue and Yong Huang  
Nanjing University of Information & Technology, China
- 6) ICGEC-2010-IS32-04  
Patch-based Face Hallucination with Locality Preserving Projection  
Qiong Kang  
Yangtze University, China
- 7) ICGEC-2010-IS32-05  
Design and Implementation Video on Demand System based on FMS +FLV  
Fang Jin  
Yangtze University, China
- 8) ICGEC-2010-IS32-06  
Design and Implementation of Remote-sensing Monitoring and Assessment System of  
Wetland in Northeast China  
Rui Feng, Yushu Zhang, Hongbo Wang, Ruipeng Ji, Jinwen Wu, Pengshi Chen, Wenying Yu,  
Shujie Zhang and Guochun Li  
Department of agricultural meteorology IAE, CMA, China
- 9) ICGEC-2010-IS32-07  
A Grid Resource Discovery Method Based on Center-distributed Virtual Community  
Chunhong Hu and Ming Zhao  
Yangtze University, China

## **Session B09: Network Application, Protocol and Security (9)**

## Session Chairs:

Dr. Zhenhua Tan, Northeastern University, China

Prof. Chun-Hua Chen, Chienkuo Technology University, Taiwan

- 1) ICGEC-2010-IS04-01  
A P2P Overlay Network Routing Algorithm Based on Hierarchy Agglomerative Clustering Topology  
Yi Ma, Guiran Chang, Zhenhua Tan and XueYi Wang  
Northeastern University, China
- 2) ICGEC-2010-IS04-02  
A P2P-Based Worm in Next Generation Network  
Wei Yang, Xiao-meng Shen, Gui-ran Chang and Yu Yao  
Northeastern University, China
- 3) ICGEC-2010-IS04-03  
A Double Auction Method for Resource Management and Bidding Strategy on Grid Resources  
Xueyi Wang, Xingwei Wang, Min Huang, Yi Ma and Zhenhua Tan  
Northeastern University, China
- 4) ICGEC-2010-IS04-04  
Frequent Item Detection on Probabilistic Data  
Shuang Wang, Jitong Chen and Guoren Wang  
Northeastern University, China
- 5) ICGEC-2010-IS04-06  
An Improved Group Key Agreement Based on Elliptic Curve  
Guangming Yang, Qi Wang, Qian Zhu, Jian Xu, Jin Chang and Long Yan  
Northeastern University, China
- 6) ICGEC-2010-IS04-08  
A Distributed Lossless Transmission Method for Tele-Medical Image  
Zhenhua Tan, Xueyi Wang, Yi Ma and Xingwei Wang  
Northeastern University, China
- 7) ICGEC-2010-IS19-01  
Comment on Kushilevitz's One-server Private Information Retrieval Scheme  
Chun-Hua Chen, Chao-Hsing Hsu and Ming-Ching Ho  
Chienkuo Technology University, Taiwan
- 8) ICGEC-2010-IS19-02  
Implement a Path Planning Method for Mobile Robots on the Unknown Environment  
Kuo-Lan Su, Sheng-Ven Shiau, Jr-Hung Guo and Yi-Lin Liao  
Yunlin University of Science & Technology, Taiwan
- 9) ICGEC-2010-IS19-03



The Idea, Analysis, and System Formation of Network Teacher Evaluation System in  
Chienkuo Technology University  
Ming-Ching Ho and Chun-Hua Chen  
Chienkuo Technology University, Taiwan

## **Session C01: Partical Swarm Optimization (7)**

### **Session Chairs:**

**Dr. Hao Luo, Prof. Zhe-Ming Lu and Prof. Hui Li, Zhejiang University, China**

- 1) ICGEC-2010-IS05-01  
Using an Interpolation Method to Make Classification Decision  
Hua-Jizhao and Wang-Jianguo  
YangZhou University, China
- 2) ICGEC-2010-IS05-02  
Method Study of Forecasting Gas Outburst Based On Rough Set  
Haining Zhang, Zhenyu Zhu and Xibin Wang  
Heilongjiang Institute of Science and Technology, China
- 3) ICGEC-2010-475  
An adaptive fuzzy weight PSO algorithm  
Changxin Liu, Chunjuan Ouyang, Ping Zhu, Weidong Tang and Chunjuan Ouyang  
Jinggangshan University, China
- 4) ICGEC-2010-464  
A best wavelet packet basis image compression algorithm based on PSO  
Chun-Juan Ouyang, Xia Li and Na Wang  
Jinggangshan University, China
- 5) ICGEC-2010-77  
Cloud Estimation of Distribution Particle Swarm Optimizer  
Ying Gao, Xiao Hu, Huiliang Liu and Fufang Li  
Guangzhou University, China
- 6) ICGEC-2010-588  
High Resolution Sonar Image Segmentation by PSO based Fuzzy Cluster Method  
Hongpo Liu, Jun Sun, Hai Wu, Shuhua Teng and Zhiguo Tan  
Henan Polytechnic Institute, China
- 7) ICGEC-2010-72  
A novel particle swarm optimization algorithm based on fuzzy velocity updating for multi-objective optimization  
W.A. Yang, Y. Guo and W.H Liao  
Nanjing University of Aeronautics and Astronautic, China

## **Session C02: Intelligent Services and Applications (7)**

### **Session Chairs:**

**Prof. Ming Zhao, Yangtze University, China**

- 1) ICGEC-2010-IS30-04  
Design of Excitation Circuits in Ultrasonic Transducers for Fouling Detection  
Sun Lingfang, Feng Guoliang, YU JIA-qi  
Northeast Dianli University, China
- 2) ICGEC-2010-IS30-06  
Data-Intensive Scientific Workflows for Grid Computing with CSCL  
Rurui Zhou  
Yangtze University, China
- 3) ICGEC-2010-IS30-07  
Research on the Fusion Method of the Distributional Auto-adapted Dynamic Data in Smart Space  
Hanyun Wen  
Yangtze University, China
- 4) ICGEC-2010-IS30-08  
An Efficient Selection Sorting Algorithm for Two-Dimensional Arrays  
Ming Zhou and Hongfa Wang  
Zhejiang Water Conservancy and Hydropower College, China
- 5) ICGEC-2010-IS30-09  
Using Remote Sensing Technology for Dynamic Monitoring of Poyang Lake Area and Capacity  
Lei Sheng, Zhang Xiu-ping, Xu Xin-fa and Fu Qun  
Jiangxi Provincial Institute of Water Sciences, China
- 6) ICGEC-2010-IS30-10  
A Study on the Optimization of the Constrained Routing Problem Based on Genetic-Ant Colony Algorithm  
Xuan Zeng and Zhenyu Tu  
Nanchang Institute of Technology, China
- 7) ICGEC-2010-IS30-13  
Design of Urban Public Transportation Positioning System Based on Overlay Network  
Jie Hu, Hanyun Wen and Lei Wu  
Yangtze University, China

## **Session C03: Intelligent Systems and Applications (8)**

Session Chairs:

Prof. Kuo-Lan Su, National Yunlin University of Science and Technology,  
Taiwan

Prof. Guiran Chang, Northeastern University, China

- 1) ICGEC-2010-IS22-01  
Ant Colony System Based Mobile Robot Path Planning  
Song-Hiang Chia, Kuo-Lan Su, Jr-Hung Guo and Cheng-Yun Chung  
Wu-Feng Institute of Technology , Taiwan
- 2) ICGEC-2010-IS22-02  
A Similarity Reasoning Scheme for Modelling of Monotonic Multi-Input Fuzzy Inference Systems  
Kai-Meng Tay and Chee Peng Lim  
University Malaysia Sarawak, Malaysia
- 3) ICGEC-2010-IS22-03  
Evolutionary Neural Networks for Time Series Prediction  
Yung-Chin Lin, Yung-Chien Lin and Kuo-Lan Su  
WuFeng University, Taiwan
- 4) ICGEC-2010-IS22-04  
The Annual Power Demand Prediction Approach by Fuzzy-Genetic Algorithm  
Wen-Bin Lin, Chia-Ching Lin, Huann-Keng Chiang, Chien-An Chen and Liang-I Tai  
National Yunlin University of Science & Technology , Taiwan
- 5) ICGEC-2010-IS22-05  
The Design and Fabrication for Compact Disk recycling process by Arc-discharge  
Chia-Ching Lin, Wen-Bin Lin, Huann-Keng Chiang and Chien-An Chen  
Far East University , Taiwan
- 6) ICGEC-2010-IS07-01  
Node Distribution Optimization in Mobile Sensor Network Based on Multi-Objective Differential Evolution Algorithm  
Lizhong Jin, Jie Jia and Dawei Sun
- 7) ICGEC-2010-IS07-02  
Application of Multi-Attribute Rating Matrix in Cold-start Recommendation  
YIN Hang, CHANG Guiran, WANG Xingwei, WU Jiehong, LI Shuo
- 8) ICGEC-2010-IS07-04  
Application of Petri Nets in Material Supply Systems  
Zhicao Dong and Xinhui Zhao  
Artillery Command Academy, China

## Poster Session: P01

- 1) ICGEC-2010-221  
The scheduling strategy of divisible task in virtual computing environment  
Hong Liang, Wenxing Wang, Chunling Dou and Jun Wu  
China University, China
- 2) ICGEC-2010-IS02-05  
A Study of Understanding Taiwanese College Students' English Language Learning Strategies Based on GM(0,N)  
Kate Tzu-Ching Chen, Hsaio-Ching Chen and Chung-Cheng Lu  
Chaoyang University of Technology, Taiwan
- 3) ICGEC-2010-IS11-06  
A Novel WLAN Indoor Positioning Algorithm based on Positioning Characteristics Extraction  
Yubin Xu, Yong Wang and Lin Ma  
Harbin Institute of Technology, China
- 4) ICGEC-2010-IS20-03  
Rule-based Phrase Identification in College English Writing  
Shi-Li Ge and Rou Song  
Guangdong University of Foreign Studies, China
- 5) ICGEC-2010-430  
Strategy Optimization of Laser Weapon Intercept Multi-Target Based on An Improved Genetic Algorithm  
Mao-Rui Zhang, Da-Wei Yang, Yong Sun and Jian-Fei Li  
Harbin Institute of Technology, China
- 6) ICGEC-2010-IS32-03  
Air temperature prediction based on EMD and LS-SVM  
Ding-Cheng Wang, Chun-Xiu Wang, Yong-Hua Xie and Tian-Yi Zhu  
Nanjing University, China

## Poster Session: P02

- 1) ICGEC-2010-34  
Towards A Context-aware Middleware in Smart Car Space  
Jie Sun, YongPing Zhang and Jianbo Fan  
Ningbo University of Technology,, China
- 2) ICGEC-2010-IS01-01  
Authenticating User's Keystroke Based on Statistical Models  
Ying Zhang, Guiran Chang, Lin Liu and Jie Jia

Northeastern University, China

3) ICGEC-2010-IS31-16

An Intrusion Detection System Model Based on Particle Swarm Reduction

Wang Hai-Bing, Fu De-Sheng

Nanjing University of Information & Technology, China

4) ICGEC-2010-150

Study on parameters optimization in numerical machining of stainless-steel based on  
MATLAB

Li dengwan, Deng weixin, Gao hongli, Xu mingheng, Chen si

Southwest Jiaotong University, China

5) ICGEC-2010-IS29-06

Performance analysis of three-tiers Wireless Sensor Networks for Urban Traffic Information  
Monitoring

Huaping Yu

Yangtze University, China

6) ICGEC-2010-IS09-04

Hardware Design of Video Stabilization System based on TMS320DM642

Xiaoping Yuan and Jieyun Liu

China University of Mining and Technology, China

### Poster Session: P03

1) ICGEC-2010-134

Application of Improved BCC Algorithm and RBFNN in Identification of Defect Parameters

KOU Wei, SUN Feng-rui, YANG Li and CHEN Lin-gen

Naval University of Engineering, China

2) ICGEC-2010-562

Community Mining in Complex Network Based on Parallel Genetic Algorithm

XiLu Zhu and Bai Wang

Beijing University of Posts and Telecommunications, China

3) ICGEC-2010-266

A study on the Internal Structure of Family Particle Swarm Optimization

Junhua Zhang, Zhenzhou An and Xinling Shi

Yunnan University, China

4) ICGEC-2010-IS30-02

Forecasting Corrosion Rate of Cooling Water Based on Least Squares Support Vector  
Machine

Yang Shanrang, Liu Xiuwei, Cao Shengxian, Zhao Bo, Hu Yanping, Liu Fan, Men Hong and  
Xu Zhiming

Northeast Dianli University, China

- 5) ICGEC-2010-IS07-06  
Parallel Implementations of Image Processing Algorithms on Multi-Core  
Ying Liu and Fuxiang Gao  
Northeastern University, China
- 6) ICGEC-2010-620  
Evaluating the Dosimetric Impact of Interfraction Variations during Image-Guided  
Radiotherapy Using Six-degree-of-freedom Image Registration and Equivalent Uniform Dose  
Method  
Chang-Yu Wang, Yu-Jie Huang, Chun-Hsiung Fang, Jyh-Horng Chou and Tsair-Fwu Lee  
National Kaohsiung University of Applied Sciences, Taiwan

### Poster Session: P04

- 1) ICGEC-2010-IS07-05  
An Architecture for Improving the Efficiency of Specialized Vertical Search Engine Based on  
GPGPUs  
Chuan Wang, Guiran Chang, Cheng Lü, Jingtao Han and Xingwei Wang  
Northeastern University, China
- 2) ICGEC-2010-IS29-11  
Wireless temperature measurement and control system based on MSP430F149  
Wei Jia, Peng Xie and Guo-Qin Feng  
Xiangfan University, China
- 3) ICGEC-2010-IS07-03  
Shared Service Architecture for Emergency Management System Development  
Qiang Guo, Guiran Chang, Dawei Sun and Xingwei Wang  
Northeastern University, China
- 4) ICGEC-2010-IS30-11  
Design of Fuzzy Logic Controllers Based on Evolvable Hardware Platform  
HuaYun Yu and DaBin Zhang  
Yangtze University, China
- 5) ICGEC-2010-IS09-09  
Coal or Rock Eelectromagnetic Emission Analysis Based on Hidden Markov Model  
Xiaobin Li, Jiansheng Qian, Nannan Lu, Can Cheng, Mingjun Dai and Shijie Shi  
China University of Mining and Technology, China
- 6) ICGEC-2010-137  
The Research on Chinese Coreference Resolution Based on Support Vector Machines  
Yihao Zhang and Peng Jin  
Leshan Teachers' College, China

## Poster Session: P05

- 1) ICGEC-2010-IS06-05  
Integrity Measurement Model Based on Trusted Virtual Platform  
Gang Qiu, Yulei Wang and Lihua Zhou  
Xidian University, China
- 2) ICGEC-2010-390  
A keyword based strategy for spam topic discovery from the Internet  
Yongqin Qiu, Yan Xu, Dan Li and Hengxun Li  
Beijing Language and Culture University, China
- 3) ICGEC-2010-IS29-02  
A novel Electro-optical Servo control technology and its application  
Qiu-ping Wang, Shun Kang, Ling Zuo and Yuan Zhou  
Northeast Dianli University, China
- 4) ICGEC-2010-69  
A Dynamic Ant Colony Optimization Algorithm for the Ad Hoc Network Routing  
SUN Gai-ping, GUO Hai-wen, WANG Dezhi, WANG Jiang-hua  
North China Institute of Science and Technology, China
- 5) ICGEC-2010-IS30-12  
Multi-innovation stochastic gradient algorithm for Hammerstien nonlinear ARX systems  
Yuwu Liao, Li Yu and Lili Xiang  
Xiangfan University, China
- 6) ICGEC-2010-0348  
Performance simulating of Electric-Liquid compound diesel speed governor device  
Bailing Song and Baoquan Zhu  
Northeast Forestry University, China

## Poster Session : P06

- 1) ICGEC-2010-53  
Vehicle Routing Problem with Simultaneous Delivery and Pick-up Based on the Improved Genetic Algorithm  
Nuo Zhu and Chunfu Shao  
Beijing Jiaotong University, China
- 2) ICGEC-2010-214  
Object Categorization using Genetic Programming  
Jyothi Korra and Susheela Devi  
Indian Institute of Science, India
- 3) ICGEC-2010-100  
Application of Genetic Algorithms in Product Assessment  
Jiayuan Yu  
Nanjing Normal University, China

- 4) ICGEC-2010-623  
Electrical biopsy for Radiation Enteropathy in Rats  
Yu-Jie Huang, Yi-Yu Lu and Kuo-Sheng Cheng  
National Cheng Kung University, Taiwan
- 5) ICGEC-2010-IS04-05  
A Commodity's Reputation-Based Trust Model of P2P E-Commerce Systems  
Fengyuan Zhu, Guangming Yang and Zhenhuan Tan  
Northeastern University, China
- 6) ICGEC-2010-IS29-03  
A Novel Rumor Routing for Wireless Sensor Network  
Yanrong Cui and Hang Qin  
Yangtze University, China

### Poster Session : P07

- 1) ICGEC-2010-IS29-04  
Data Query Protocol Based on Minimum Spanning Tree for Wireless Sensor Network  
Yanrong Cui and Hang Qin  
Yangtze University, China
- 2) ICGEC-2010-IS30-03  
 $H^\infty$  Robust Control of Combustion Based on the Radiant Energy Signal  
Lijun Chen, Hong Xue, Bo Sun and Zhengxing Zhou  
Northeast Dianli University, China
- 3) ICGEC-2010-546  
An Multiple-Data Multicast Routing Protocol for DTN  
Kuang Zhufang and Chen Shenzhao  
Central South University of Forestry & Technology, China
- 4) ICGEC-2010-451  
Predicting Sensitive Relationships from Email Corpus  
Hanhe Lin  
Sichuan University, China
- 5) ICGEC-2010-542  
An Multicast Routing Based On Ant Colony Optimization Algorithm for DTN  
Kuang Zhufang  
Central South University of Forestry & Technology, China
- 6) ICGEC-2010-65  
Immune genetic algorithm-based load balancing in web cluster  
Rina Su and Yu Wang  
Ningbo University of Technology, China
- 7) Ningbo University of Technology, China