

# Time Schedule

Time	Aug. 04, 2010(Wednesday)	
08:00~08:30	Registration	
08:30~09:00	Opening	
09:00~10:30	Chair : Timothy K. Shih Keynote speaker : Chin-Chen Chang Title: Authenticatable Visual Secret Sharing	
10:30~10:40	Coffee Time	
10:40~12:10	Room A(84A1) Session Chair: Tz-Liang Kueng Session Title: Web Services, Internet Technologies Computing and Interconnection Networks	Room B(84B1) Session Chair: Chia-Hui Wang Session Title: Distributed, Parallel Computing and Multimedia Technologies
12:10~13:30	Lunch Time	
13:30~15:15	Room A(84A2) Session Chair: Chao-Tung Yang Session Title: Cluster, Grid and P2P Computing	Room B(84B2) Session Chair: Chwei-Shyong Tsai Session Title: Database, Data Mining and Web Service
	Room A(84A3) Session Chair: Christian Woelfert Special Session : Flex Web	
15:15~15:30	Coffee Time	
15:30~17:15	Room A(84A3) Session Chair: Christian Woelfert Special Session : Flex Web	Room B(84B3) Session Chair: Lin-Huang Chang Session Title: Mobile Computing and Wireless Communications
From 18:00	Banquet	

# Time Schedule

Time	Aug. 05, 2010(Wednesday)	
08:30~09:00	Registration	
09:00~10:30	Keynote Speech Chair : Yeh-Ching Chung Keynote speaker : Cho-Li Wang Title: Towards High Productivity Petaflops-scale Computing – The Distributed JVM Approach	
10:30~10:40	Coffee Time	
10:40~12:10	Room A (85A1) Session Chair: Meng-Yen Hsieh Session Title: Embedded, Ubiquitous Computing and Hardware / Software co-design	Room B (85B1) Session Chair: Robert C. Hsu Session Title: Image Processing
12:10~13:30	Lunch Time	
13:30~15:15	Room A (85A2) Session Chair: Tsung-Yen Chuang Session Title : E-Learning and Education & Interaction	Room B (85B2) Session Chair: Jason C. Huang Session Title: Security, Privacy, Trust, Ethical and Other Issues
15:15~15:30	Coffee Time	
15:30~17:15	Room A (85A3) Session Chair: Juhng-Perng Su Special Session : Graphic and Intelligent Algorithm	Room B (84B3) Session Chair: Hsing-I Wang Special Session : E-Commerce/E-Government

# Session-84A1

## (Web Services, Internet Technologies Computing and Interconnection Networks)

**Session Chair: Tz-Liang Kueng**

**1. MITIGATION TECHNIQUES FOR THE ENERGY HOLE PROBLEM IN SENSOR NETWORKS USING N-POLICY M/G/1 QUEUING MODELS**

*Fuu-Cheng Jiang, Der-Chen Huang, Chao-Tung Yang, Kuo-Hsiung Wang*

**2. On the Double-Pancyclicity of Augmented Cubes**

*Tzu-Liang Kung, Yuan-Kang Shih, Tsung-Han Tsai, Lih-Hsing Hsu*

**3. Emotional classification model for tourism base on the point of view of life-record**

*Jason C. Hung, Lily Chang, YU-Bing Wang, Mi-Feng Lee, Yueh-Hsuan Lee*

**4. CONGESTION- AND ENERGY-AWARE RUN-TIME MAPPING FOR TILE-BASED NETWORK-ON-CHIP ARCHITECTURE**

*Shih-Shen Lu, Chun-Hsien Lu, Pao-Ann Hsiung*

**5. A SLA-BASED DYNAMICALLY INTEGRATING SERVICES SAAS FRAMEWORK**

*Chia-Hsien Wen, Hei-Ru Shiau, Chen-Yen Wang, Szu-Yen Wang*

**6. SOCIAL NETWORK LEARNING BASED ON BLUE-RED TREES INFERENCE AND ANALYSIS OF RULE-SPACE MODEL**

*Yung-Hui Chen, Yen-Da Chen, Chiou-Yng Lee, Martin M. Weng, Neil Y. Yen, Hui-Ju Lu*

# Session-84B1

## (Distributed, Parallel Computing and Multimedia Technologies)

**Session Chair: Chia-Hui Wang**

- 1. INTELLIGENT CONTROLLER WITH CACHE FOR CRITICAL INFRASTRUCTURES**  
*Lichen Weng, Xinwei Niu, Chen Liu, Niki Pissinou*
- 2. Adaptive Color Image Style Transformation for Video**  
*Rong-Chi Chang, Cheng-Chung Chang*
- 3. Energy-Efficient Fault-Tolerant Configuration in Heterogeneous Wireless Sensor Networks**  
*Meng-Chun Wueng, Chin-Ho Lee, Shyh-In Hwang*
- 4. Reversible Data Hiding with Affine Invariance for 3D Models**  
*Cheng-Hung Chuang, Chin-Wei Cheng, Zhi-Ye Yen*
- 5. Parallel Reconfigurable Computing and its Application to Hidden Markov Model**  
*Anand Paul, Yung-Chuan Jiang, Jechang Jeong*

# Session-84A2

## (Cluster, Grid and P2P Computing)

**Session Chair: Kuo-Chan Huang**

- 1. A COMPLETED PARTIAL ORDER OF ORDERED SEMI-VECTORS-SPACE OF INTUITIONISTIC FUZZY VALUES**

*Hsiang-Chuan Liu*

- 2. A LOAD-SHARING OVERLAY NETWORK DESIGN AND SIMULATIONS FOR CONFERENCING VOIP**

*Wei-Chih Chen, Yu-Shun Liu, Yu-Sheng Li, Chia-Hui Wang*

- 3. PERFORMANCE EVALUATION OF GFARM AND GPFS-WAN IN DATA GRID ENVIRONMENT**

*Kuo-Yang Cheng, Hui-Shan Chen, Chia-Yen Liu*

- 4. SERVICE MOBILITY SUPPORT FOR PERVASIVE GRID BASED ON SIP**

*Yi-Shi Wu, Chung-Fan Liu, Chyi-Nan Chen*

# Session-84B2

## (Database, Data Mining and Web Service)

**Session Chair: Chwei-Shyong Tsai**

**1. A SPACE-EFFICIENT AND MULTI-OBJECTIVE CASE-BASED REASONING IN COGNITIVE RADIO**

*Ken-Shin Huang, Chih-Hseng Lin, Pao-Ann Hsiung*

**2. AN ENHANCED CLUSTER VALIDITY INDEX METHOD COMPRISING ROUGH SET THEORY AND MODIFIED PBMF INDEX FUNCTION**

*Kuang-Yu Huang*

**3. An ID-tree Index Strategy for Supporting Similarity Searches in Information Filtering Systems**

*Ye-In Chang, Jun-Hong Shen, Yi-Siang Wang*

**4. Evaluating the Ambiguity of Class Structures via Instance Neighbor Entropy with Weighting**

*Jing-Doo Wang, Yao-Chug Shi*

**5. PREFERENCE UTILITY MINING OF WEB NAVIGATION PATTERNS**

*Yu-Cheng Chen, Jieh-Shan Yeh*

**6. New Data Structure and Algorithm for Mining Dynamic Periodic Patterns**

*Te-Hsun Lin, Jieh-Shan Yeh*

# Session-84A3

## (Special Session : Flex Web)

**Session Chair: Christian Woelfert**

**1. THE REACH OF DYNAMIC PLAN GENERATION FOR ENTERPRISE PLANNING WEB SERVICES**

*Oksana Arnold, Klaus Jantke ,Christoph Vogler, Hans-Rainer Beick, Jan Opfermann*

**2. USING WEB-BASED MEME MEDIA TECHNOLOGIES TO CREATE AN INTEGRATED VISUAL ENVIRONMENT FOR CLINICAL TRIALS**

*Jonas Sjobergh, Micke Kuwahara, Yuzuru Tanaka*

**3. WEBBLE WORLD - A WEB-BASED KNOWLEDGE FEDERATION FRAMEWORK FOR PROGRAMMABLE AND CUSTOMIZABLE MEME MEDIA OBJECTS**

*Micke Kuwahara, Yuzuru Tanaka*

**4. OBJECT-ORIENTED GRAPHICAL-TEMPLATE COMPOSITION FRAMEWORK FOR INFORMATION VISUALIZATION**

*Shi Wei, Yuzuru Tanaka*

**5. 3D TECHNIQUES FOR VISUALIZING USER ACTIVITIES ON MICROBLOGS**

*Masahiko Itoh*

**6. PADLOGSPACE: A PROLOG-BASED NEW SOFTWARE ARCHITECTURE FOR THE SERVICE FEDERATION OF WEB RESOURCES**

*Lkhamsuren Damdinsuren, Yuzuru Tanaka*

**7. AUTO CONNECTION MECHANISMS FOR AN EDUCATIONAL VIRTUAL LABORATORY**

*Jun Fujima*

**8. ADAPTIVE USER SUPPORT THROUGH CASE BASED REASONING FOR THE INTELLIGENTPAD PLATFORM**

*Christian Woelfert*

**9. MEMETIC GAME CONCEPTS: APPROACHING CONTENT EVOLUTION IN GAMES**

*Swen Gaudl, ChristianWoelfert*

# Session-84B3

## (Mobile Computing and Wireless Communications)

**Session Chair: Lin-Huang Chang**

- 1. A PATH SELECTION MECHANISM IN 802.16J MOBILE MULTI-HOP NETWORKS**  
*Wei-Te Hsiao, Jian-Ming Chang, Jiann-Liang Chen, Han-Chieh Chao*
- 2. THE 6LoWPAN AD-HOC ON DEMAND DISTANCE VECTOR ROUTING WITH MULTI-PATH SCHEME**  
*Jian-Ming Chang, Ting-Yun Chi, Hsin-Yun Yang, Han-Chieh Chao*
- 3. A Systematical Approach for Learner Group Composition by Utilizing U-Learning Portfolio**  
*Ting-Ting Wu, Yueh-Min Huang*
- 4. Monitoring Procedures for Tourism Using RFID and Google Maps technologies**  
*Meng-Yen Hsieh, Kuan-Ching Li*
- 5. Efficient Batch-arrival Queueing Model for Qos-aware Packet Scheduling in WiMax Networks**  
*Jui-Chi Chen*
- 6. The study on the effectiveness for the handoff of WLAN and RFID**  
*Chung-Hsin Liu, Sheng-Shiang Chang*
- 7. A DISTRIBUTED COMMUNICATION PROTOCOL FOR WIRELESS SENSOR NETWORKS WITH ASYNCHRONOUS SUPERFRAME**  
*Chun-Chi Lo, Yu-Chen Hu, Chia-Ying Li*



# Session-85A1

## (Embedded, Ubiquitous Computing and Hardware / Software co-design)

**Session Chair: Meng-Yen Hsieh**

**1. A COMPLEX EVENT PROCESSING METHOD BASED ON PRE-GROUPING FOR  
RADIO FREQUENCY IDENTIFICATION DATA STREAMS**

*Chia-Ming Wu, Ruay-Shiung Chang, Chang-Chih Chen*

**2. On the study of a ubiquitous healthcare Network with Security and QoS**

*Cheng-Chan Hung, Shiow-Yuan Huang*

**3. Hierarchical Decoder for Filter-Based Low-Power BTB**

*Yeong-Chang Maa, Mao-Hsu Yen, Chun-Hung Wang, Guan-Luen Lee, Xumin Guo*

**4. THE DESIGN OF A SHOULDER REHABILITATION GAME SYSTEM**

*Chun-Ming Chang, Yen-Ching Chang, Bing-Yu Hsiao*

**5. Dynamic Hardware-Software Task Switching and Relocation Mechanisms for  
Reconfigurable Systems**

*Kai-Jung Shih, Hong-Yu Sun, Pao-Ann Hsiung*

# Session-85B1

## (Image Processing)

**Session Chair: Lawrence Y. Deng**

- 1. Embedding Data and Sharing Original Image in Two Stego Images Using Sudoku**  
*Chin-Chen Chang, Yung-Chen Chou, The Duc Kieu*
- 2. STUDY ON IMAGE FEATURE SELECTION: A GENETIC ALGORITHM APPROACH**  
*Hsin-I Huang, Chuen-Horng Lin, Yung-Kuan Chan, Yu-Sheng Wu*
- 3. A NOVEL HISTOGRAM EQUALIZATION FOR IMAGE CONTRAST ENHANCEMENT WITH MEAN BRIGHTNESS PRESERVATION**  
*Pei-Chen Wu, Fan-Chieh Cheng, Yu-Kung Chen*
- 4. AUTOMATIC OPTIMIZATION SYSTEM FOR CD-PHANTOM IMAGE QUALITY**  
*Chuen-Horng Lin, Yung-Kuan Chan, Yung-Fu Chen, Yu-Jung Cheng*
- 5. Extraction of Vehicle License Plate Number Using License Plate Calibration**  
*Chen-Chung Liu, Zhi-Chun Luo*
- 6. A Face Identification Algorithm Using Support Vector Machine Based on Binary Two Dimensional Principal Component Analysis**  
*Chen-Chung Liu, Shiuan-You Chin*

# Session-85A2

## (E-Learning and Education & Interaction)

**Session Chair: Tsung-Yen Chuang**

**1. XML TO USER INTERFACE BINDING**

*Lendle Tseng, Yue-Sun Kuo, Hsiu-Hui Lee, Chuen-Liang Chen*

**2. Advantageous Next Generation Adaptivity Through Reflection**

*Klaus Jantke*

**3. Hypermedia Note Taking**

*Klaus Jantke, Jun Fujima*

**4. DIGITAL GAME-BASED LEARNING IN IMPROVING STUDENTS' REASONING: A PILOT STUDY**

*Tsung-Yen Chuang, Hsia-Yen Tseng, Su-Chun Liu, Yu-Lun Lin*

**5. CONSTRUCTING A MULTI-PERSPECTIVE LEARNING ENVIRONMENT USING BLOG TECHNOLOGY AND TOPIC MAPS**

*Tien-Chi Huang, Yu Shu*

**6. DIGITAL GAME DESIGN PRINCIPLES FOR SPATIAL ABILITY ENHANCEMENT**

*Tsung-Yen Chuang, Jia-Hau You, Andrew Duo*

**7. Using Competitive Digital Game-Based Learning to Improve Learning Motivation**

*Kuan-Cheng Lin, Ting-Kuan Wu, Yu-Bin Wang*

# Session-85B2

## (Security, Privacy, Trust, Ethical and Other Issues)

**Session Chair: Jason C. Hung**

**1. HOW DIFFERENT PERSONALITY TYPES ARE RELATED TO PERCEPTION OF PROFESSIONAL ETHICS**

*Ruilin Lin, Jingchen Xie, Yoau-Chau Jeng, Jian Li*

**2. Combinatorial Reverse Auction for Multiple Buyers**

*Fu-Shiung Hsieh, Chung-Wei Huang*

**3. DESIGN AND IMPLEMENTATION OF A CONTEXT AND ROLE-BASED ACCESS CONTROL MODEL FOR DIGITAL CONTENT**

*Mei-Yu Wu, Yi-Wei Chen, Chih-Kun Ke*

**4. A new non-expansion visual cryptography scheme with high quality of recovered image**

*Tsung-Hung Lin, Ni-Shan Shiao, Hong-Hao Chen, Chwei-Shyong Tsai*

**5. An Effective Splog Detector for Chinese Weblogs**

*Meng-Chien Yang, Chia-Ping Chen*

**6. Enhanced Multiparty Quantum Secret Sharing of Classical Messages based on Entanglement Swapping**

*Yao-Hsin Chou, Rui-Kai Fan, Shuo-Mao Chen, Chi-Yuan Chen, Han-Chieh Chao*

**7. A Three-party Encrypted Key Exchange Protocol with Protected Password Authentication**

*Hsing-Chung Chen, Hsien-Yun Chuang*

# Session-85A3

## (Special Session : Graphic and Intelligent Algorithm)

**Session Chair:** Juhng-Perng Su

**1. EVOLUTIONARY NOISE REDUCTION BASED ON CORRELATION EVALUATION**

*Chan-Cheng Liu, Sheng-Ta Hsieh, Wei-Chih Huang*

**2. Design and Realization of a Sliding Mode Control Scheme for a Pneumatic Cylinder X-Y Axles Position Servo System**

*H. M. Chen, Y. P. Shyu, C. H. Chen*

**3. IMAGE-GUIDED POSITION AND HEIGHT ESTIMATION FOR UNMANNED HELICOPTER**

*Kuo-Hsien Hsia, Shao-Fan Lien, Ting-En Lee, Juhng-Perng Su, Chi-Jung Huang*

**4. An improved Multi-Objective Genetic Algorithm for Solving Flexible Job Shop Problem**

*Sheng-Ta Hsieh, Shih-Yuan Chiu, Shi-Jim Yen*

**5. RELIABLE MOVING OBJECT EXTRACTION AND COUNTING**

*Yuan-Been Chen*

**6. SHAPE CONTEXT BASED MATCHING FOR HAND GESTURE RECOGNITION**

*Lawrence Y. Deng, Dong-Liang Lee, Huan-Chao Keh, Yi-Jen Liu*

# Session-85B3

## (Special Session: E-Commerce / E-Government)

### Session Chair: Hsing-I Wang

**1. Value-oriented Human Relationship Influence Spectrum**

*Benjamin Penyang Liao*

**2. A Study on E-Commerce Applying in Taiwan's Food Franchise**

*Song-Ching Fan, Yung-Lung Lai*

**3. Application of AHP for Prioritizing the Measurements of the Performance of Reducing Digital Divide**

*Hsing-I Wang*

**4. AN E-SERVICE DESIGN ON STROKE-PRECAUTION FOR ELDERLY**

*Y. C. Hwang*

**5. Semantic Case-based Reasoning for Virtual Enterprises in Project Management**

*Chouyin Hsu*

**6. DYNAMIC MAX-MIN DIFFERENCE HISTOGRAM DATA HIDING**

*H. W. Yang*

**7. A GLIMPSE OF B&Bs PROMOTION WITH INTERNET MARKETING— A CASE ATUDY OF JC B&Bs IN TAIWAN**

*Lan-Sheng Kuo, Wen-Hsiang Shen, Wu-Tsong Shih, Po-Shan Wang, Yin-Li Cheng*

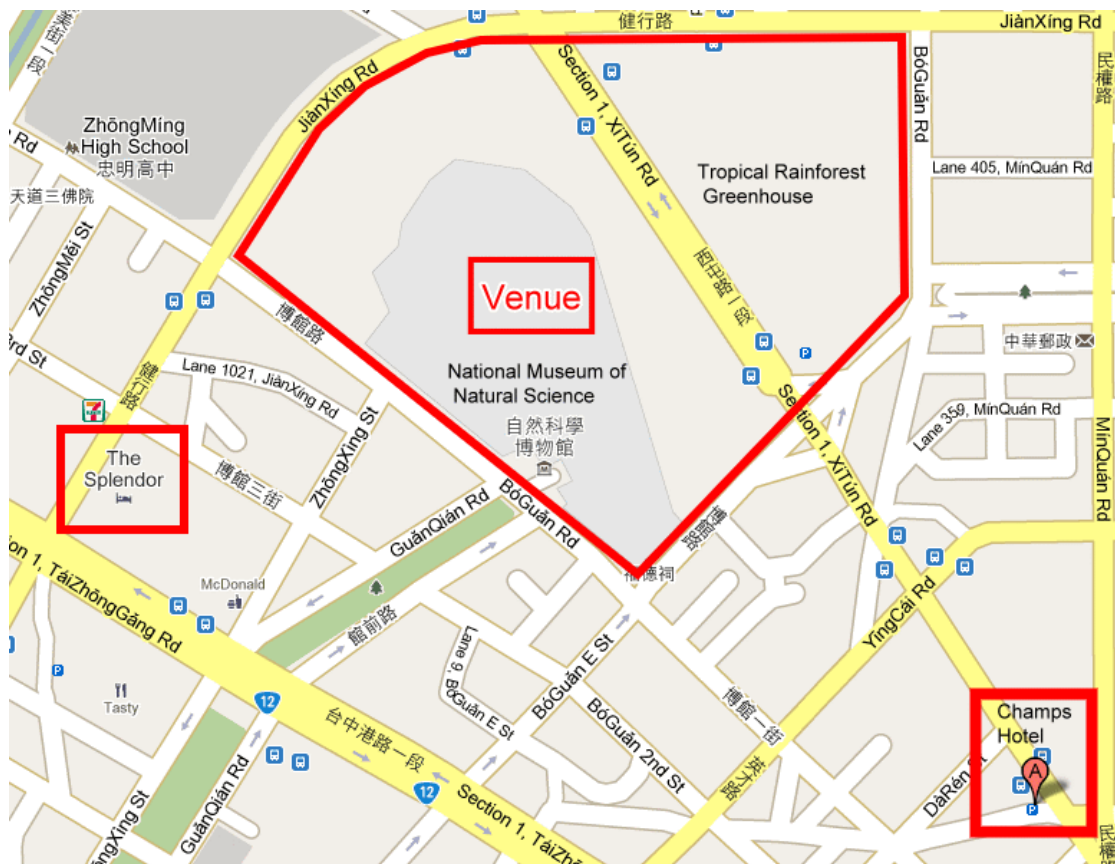
# MAP

## National Museum of Natural Science

One Guancian Road

Taichung, Taiwan 404

The National Museum of Natural Science is located in downtown Taichung. From Chung-shan Highway (**Chung-gang Exit**), take Chung-gang Road east to the railway station, pass **SOGO Department Store**, turn left at the first or second traffic light. It is on a block bordered by Chien-hsing Rd., Po-kuan Rd. and His-tun Rd. The following [directions](#) will make getting here much easier. Drive to participate in this conference suggested that the car stopped in the parking lot nearby the XiTun Road.



### Hotel Information:

- The Splendor Hotel Taichung (No. 1049, Jian Xing Rd.)
- The Champs Hotel (No. 173, section 1, Xi Tun Rd.)



- |   |                                       |
|---|---------------------------------------|
| 01. <a href="#">Windmill</a>                | 21. <a href="#">Paradox</a>           |
| 02. <a href="#">The Path of Evolution</a>   | 22. Restrooms                         |
| 03. <a href="#">Sundial</a>                 | 23. Bus Drivers' Lounge               |
| 04. <a href="#">Luoh-Shu</a>                | 24. <a href="#">Parking</a>           |
| 05. <a href="#">Ho-Twu</a>                  | 25. <a href="#">Water Clock</a>       |
| 06. <a href="#">Canadian Red Deer</a>       | 26. Oval Plaza                        |
| 07. Restrooms                               | 27. Birdwing Butterfly                |
| 08. <a href="#">Space Theater</a>           | 28. Tropical Rainforest Greenhouse    |
| 09. <a href="#">Science Center</a>          | 29. Northern Lowlands Ecological Area |
| 10. Administration Building                 | 30. Central Lowlands Ecological Area  |
| 11. <a href="#">Life Science Hall</a>       | 31. Southern Lowlands Ecological Area |
| 12. <a href="#">Human Cultures Hall</a>     | 32. Monsoon Forest Ecological Area    |
| 13. Information Building                    | 33. Coral Atoll Ecological Area       |
| 14. <a href="#">Global Environment Hall</a> | 34. Native Lianas and Legumes         |
| 15. <a href="#">3-D Theater</a>             | 35. Special Exhibition Room           |
| 16. <a href="#">Parking Lot</a>             | 36. Research and Education Center     |
| 17. Restrooms                               | 37. Nursery                           |
| 18. <a href="#">Reflecting Scope</a>        | 38. Orchid Island Ecological Area     |
| 19. <a href="#">Prehistoric Garden</a>      | 39. Littoral Forest Ecological Area   |
| 20. <a href="#">DNA Double Helix</a>        | 40. Taitung Cycads                    |