

## Program at a Glance

Thursday, Jan. 15, 2009			
9:00~9:25	Opening session		
9:30~11:00	Session Wireless LAN & Mesh networks	Session Data Search I	
11:00~11:15	Break		
11:15~12:30	Session Telecommunication Networks	Session Data Search II	Session Systems and Applications I
12:30~2:00	Lunch		
2:00~3:45	Session Ad Hoc Networks	Session Security I	Session Ph. D. Research Advising
3:45~4:00	Break		
4:00~5:45	Session Communication Technologies	Session Security II	
Friday, Jan. 16, 2009			
9:00~10:30	Session Intelligent Systems	Session Systems and Applicataions II	
10:30~10:45	Break		
10:45~12:40	Session Systems and Applications III	Session Data Analysis and Mining I	
12:40~2:00	Lunch		
2:00~3:45	Session Signal Processing and OFDM	Session Systems and Applicataions IV	Session Ph. D. Research Advising
3:45~4:00	Break		
4:00~6:00	Session Sensor Networks	Session Systems and Applicataions V	Session Data Analysis and Mining II

# Conference Program

Thursday, Jan. 15, 2009	
9:00~9:25	Opening session
9:30~11:00	<p><b>Session : Wireless LAN and Mesh Networks</b></p> <p>Performance Enhancement for IEEE 802.11e Networks by Adaptive Adjustment of the HCCA/EDCA Ratio Wei Kuang Lai, Chin-Shiuh Shieh, Chih-Shiuan Jiang (National Kaohsiung University, National Sun Yat-Sen University, Taiwan)</p> <p>Mechanisms for the Maintenance of MP Proxy Tables in IEEE 802.11s Mesh Networks Shih-Tsung Liang (Taipei Municipal University of Education, Taiwan)</p> <p>Wi-Fi Based Radio Map for Location Sensing by Hypothesizing Existence of Barriers Masaaki Kuwabara, Nobuhiko Nishio (Ritsumeikan University, Japan)</p> <p>Proposal and Evaluation of Multiple Gateways Distribution Method for Wireless Mesh Network Masashi Ito, Toshihiro Shikama, Akira Watanabe (Meijo University , Fukui University, Japan)</p> <p>ARP-like Direct Link Transmission Scheme in WLAN Yuh-Chung Lin, Wei Kuang Lai, Feng-Jung Liu (Tajen University, National Sun Yat-sen University, Taiwan)</p> <p>Two-phase Mobile Transaction Validation in Wireless Broadcast Environments Miseon Choi, Wonik Park, Youngkuk Kim (Chungnam National University, Korea)</p> <p><b>Session : Data Search I</b></p> <p>Web Search and Information Credibility Analysis Bridging the Gap between Web1.0 and Web2.0 Katsumi Tanaka (Kyoto University, Japan)</p> <p>An Efficient Hash-Based Searching for Specimens in the Museum's Exhibit PaiTzu Chang (National Museum of Natural Science, Taiwan)</p> <p>Towards an Integrated Framework for Querying Collection of Heterogeneous Data Sujeet Pradhan (Kurashiki University of Science and the Arts, Japan)</p> <p>Pivoted Table Index for Querying Product-Property-Value Information Hyunja Lee, Junho Shim (Sookmyung Women's University, Korea)</p> <p>Object-Name Search by Visual Appearance and Spatio-Temporal Descriptions Shun Hattori, Katsumi Tanaka (Kyoto University, Japan)</p> <p>Concept Vector Extraction from Wikipedia Category Network Masumi Shirakawa, Kotaro Nakayama, Takahiro Hara, Shojiro Nishio (The University of Tokyo, Osaka University, Japan)</p>
11:00~11:15	Break
11:15~12:30	<p><b>Session : Telecommunication Networks</b></p> <p>Web Services Provision: Solutions, Challenges and Opportunities Qing Li, An Liu, Hai Liu, Baoping Lin, Liusheng Huang, Naijie Gu (City University of Hong Kong, CityU-USTC Advanced Research Institute, University of Science &amp; Technology of China, Hong Kong, China)</p> <p>A Multi-stage Collaborative Filtering Approach for Mobile Recommendation Li-Hua Li, Fu-Ming Lee, Yu-Chun Chen, Chieh-Yu Cheng</p>

	<p>(Chaoyang University of Technology, SourceCode Technology Holdings, Taiwan)  Dynamic Load Balancing in RCAN Content Addressable Network  Djelloul Boukhelef, Hiroyuki Kitagawa  (University of Tsukuba, Japan)</p> <p>COS: Client Oriented Scheduling for Multi-channel On-demand Broadcast  Kai Liu, Victor C.S.Lee  (City University of Hong Kong, Hong Kong)</p> <p><b>Session: Data Search II</b></p> <p>Small Knowledge: A Concept of Enhanced Bookmarks with Personal Context  Akiko Hino, Katsumi Tanaka  (Kyoto University, Japan)</p> <p>Metadata Management for Integration and Analysis of Earth Observation Data  Akira Takahashi, Masashi Tatedoko, Hiroko Kinutani, Masatoshi Yoshikawa  (The University of Tokyo, Kyoto University, Japan)</p> <p>Efficient Valid Scope Computation for Location-Dependent Spatial Queries in Mobile and Wireless Environments  Ken C. K. Lee, Wang-Chien Lee, Hong Va Leong, Brandon Unger, Baihua Zheng  (Pennsylvania State University, The Hong Kong Polytechnic University, Singapore Management University, USA, Hong Kong, Singapore)</p> <p>A Fuzzy Quantization Approach to Image Retrieval Based on Color and Texture  Xinzhong Zhu, Jianmin Zhao, Jie Yuan, Huiying Xu  (Zhejiang Normal University, China)</p> <p><b>Session : Systems and Applicataions I</b></p> <p>The Effects of Personality Factors on Participation in Online Learning  Iwen Huang  (Department of Information and Learning Technology National University of Tainan, Taiwan)</p> <p>The Design and Implementation of an Extensible Network Backup System in Realtime  Nishimura Satoshi, Sano Mutsuo, Ikeda Katsuo  (Osaka Institute of Technology, Japan)</p> <p>Quantitative Evaluation between Rival Planning Systems with Dosimetric Indices  Pei-Ju Chao, Tsair-Fwu Lee, Te-Jen Su, Fu-Min Fang  (National Kaohsiung University of Applied Sciences, Chang Gung Memorial Hospital-Kaohsiung Medical Center, Chang Gung University College of Medicine, Taiwan)</p> <p>Automatic Vehicle Parking System Using Gyroscope  Chih-Yen Wu, Shih-Hao Huang, Peng-Liang Peng, Gwo-Jia Jong  (National Kaohsiung University of Applied Sciences, Taiwan)</p>
12:30~2:00	Lunch
2:00~3:45	<p><b>Session : Ad-hoc Networks</b></p> <p>Implementation of Hierarchical GAF, a Cooperative Power Saving Scheme for Sensor Networks  Takashi Osawa, Tokuya Inagaki, Susumu Ishihara  (Shizuoka University, japan)</p> <p>ATMOS: A middleware for Transparent MOBILE ad-hoc networking Systems  Sho Fujita , Hiroshi Esaki  (The University of Tokyo, japan)</p> <p>Message Routing on Potential-Fields in Forwarding-Based DTNs  Hideya Ochiai, Hiroshi Esaki  (The University of Tokyo, japan)</p> <p>Efficient Location-Aided Flooding Scheme Initiated by Receiver for MANETs  Ngoc Duy Pham, Hyunseung Choo  (Sungkyunkwan University, Korea)</p> <p>Connectivity-based Clustering with Stretching Technique in MANETs  Khac Tiep Mai, Dongkun Shin, Hyunseung Choo</p>

	<p>(Sungkyunkwan University, Korea)</p> <p><b>Session : Security I</b></p> <p>Robustness-set in Watermarking Embedding Systems Using Codebook Classifications Wen-Ya Chiang, Shiu-Jeng Wang, Chi-Yao Weng, Cheng-Hsing Yang (Central Police University, National Tsing-Hua University, National PingTung University of Education, Taiwan)</p> <p>Counteract SYN Flooding Using Second Chance Packet Filtering Chu-Hsing Lin, Fuu-Cheng Jiang, Wei-Shen Lai, Wei-Yuah Lee, Wei-Cheng Hsu (Tunghai University, Chienkuo Technology University, Taiwan)</p> <p>Secure RFID Authentication Scheme for EPC Class Gen2 Daehee Seo, Jangmi Baek, Dongsub Cho (Ewha Womans University, Soonchunhyang University, Korea)</p> <p>A Reversible Data Hiding Scheme Based on Dual Steganographic Images Chin-Feng Lee, Kuo-Hui Wang, Chin-Chen Chang, Yu-Lin Huang (Chaoyang University of Technology, Feng Chia University, National Chung Cheng University, Taiwan)</p> <p>A New Method for Intrusion Detection on Hierarchical Wireless Sensor Networks Rung-Ching Chen, Chia-Fen Hsieh, Yung-Fa Huang (Chaoyang University of Technology, Taiwan)</p> <p>An Information Hiding Scheme by Applying the Dynamic Programming Strategy to LSB Matching Revisited Chi-Shiang Chan, Ching-Yun Chang (Asia University, Oxford University, Taiwan, England)</p> <p>Enhancement of the RFID Security Method with Ownership Transfer Hsing-Bai Chen, Wei-Bin Lee, Yong-Hong Zhao, Yin-Long Chen (Feng Chia University, Taiwan)</p> <p>RBAC-Based Access Control for Privacy Protection in Pervasive Environments Kyuil Kim, Wongil Choi, Eunju Lee, Ungmo Kim (Sungkyunkwan University, Korea)</p>
3:45~4:00	Break
4:00~5:45	<p><b>Session : Communication Technologies</b></p> <p>An Effective Approach to Adaptive Bandwidth Allocation with QoS Enhanced on IP Networks Mong-Fong Horng, Yau-Hwang Kuo, Liang-Chien Huang, Yi-Ting Chien (National Kaohsiung University of Applied Sciences, National Cheng-Kung University, Taiwan)</p> <p>New Synchronization Schemes for UWB Systems Dahae Chong, Sangho Ahn, Youngpo Lee, Seokho Yoon (Sungkyunkwan University, Korea)</p> <p>Performance of Double Binary Turbo Coded UWB Systems with Antenna Diversity Euncheol Kim, Jinyoung Kim (Kwangwoon University, Korea)</p> <p>A Preliminary Study on Common Radio Resource Management in Heterogeneous Wireless Networks Choongyong Shin, Jinsung Cho (Kyung Hee University Korea)</p> <p>Performance Analysis of STBC-UWB Systems with Double Binary Turbo Code Jaesung Park, Jinyoung Kim (Kwangwoon University, Korea)</p> <p>An Anonymous Communication Model for Privacy-Enhanced Location Based Service Using an Echo Agent Eunae Cho, Changjoo Moon, Hyunsoo Im, Dookwon Baik (Korea University, Konkuk University, Ahnlab Inc., Korea)</p> <p>Resource Allocation Algorithm Considering a Priority of Service Classes for WiMedia UWB System Kwangchun Go, Jaehyun Kim, Seonghwan Oh, Kyeongdeok Moon, Kwangil Lee (Ajou University Korea, Ssangyong Motor, ETRI, Korea)</p> <p>Simplified Sum-Product Algorithm Using Piecewise Linear Function Approximation for Low Complexity LDPC Decoding Jaehee Han, Myunghoon Sunwoo</p>

	(Ajou University, Korea)  <b>Session : Security II</b>  The Design of E-Traveler's Check with Efficiency and Mutual Authentication Chin-Chen Chang, Shih-Chang Chang (Feng Chia University, National Chung Cheng University, Taiwan) The Triple-Watermarking Algorithm with Multiple Description Coding over Lossy Communication Networks Shu-Chuan Chu, Lakhmi C. Jain, Hsiang-Cheh Huang, Jeng-Shyang Pan (Cheng-Shiu University, University of South Australia, National University of Kaohsiung, Nat'l Kaohsiung University, Taiwan, Australia) DCT-based Reversible Data Hiding Scheme Chia-Chen Lin, Pei-Feng Shiu (Providence University, Taiwan) Embedding Secret Messages Based on Chaotic Map and Huffman Coding Kuo-Nan Chen, Chin-Feng Lee, Chin-Chen Chang (National Chung Cheng University, Chaoyang University of Technology, Feng Chia University Taiwan) An Efficient Block-based Lossless Information Hiding Technique Tzu-Chuen Lu, Ying-Hsuan Huang (Chaoyang University of Technology, Taiwan)
Thursday, Jan. 16, 2009	
9:00~10:30	<b>Session : Intelligent Systems</b>  Merging Element Fuzzy Cognitive Maps Xiangfeng Luo, Yi Du, Fangfang Liu, Zhian Yu, Weimin Xu (Shanghai University, China) Modelling 3D Workspace using Real Planes for Network-based Robotics Jaekyu Lee, Seongjin Ahn, Jinwook Chung (Sungkyunkwan University, Korea) Bilinear-Pairing-Based Remote User Authentication Schemes Using Smart Cards Al-Sakib Khan Pathan, Choongseon Hong (Kyung Hee University, Korea) Low Complexity Soft-Decision Demapper for Digital Video Broadcasting System Jangwoong Park, Myunghoon Sunwoo, Pansoo Kim, Daelg Chang (Ajou University, ETRI, Korea) Evaluation of the expressions of robotic emotions of the emotional robot, "Mung" Eun Ho Kim, Sonya S. Kwak, Jeonghye Han, Yoon Keun Kwak (KAIST, Cheongju National University of Education, Korea)  <b>Session : Systems and Applications II</b>  Research Works on Cluster Computing and Storage Area Network Masato Oguchi (Ochanomizu University, Japan) Vision-based Nighttime Vehicle Detection and Tracking for Driver Assistance Yen-Lin Chen, Bing-Fei Wu, Jim-Min Lin (Asia University, National Chiao Tung University, Feng Chia University, Taiwan) A Modeling Method Based on CCS for Workflow Li Zhao, Qing Li, Xiaoli Liu, Nanshan Du (City University of Hong Kong, Wuhan University, Jinan University, China) A High-efficient Inter-Domain Data Transferring System for Virtual Machines Dingding Li, Hai Jin, Yingzhe Shao, Xiaofei Liao (Huazhong University of Science and Technology, China)
10:30~10:45	Break
10:45~12:40	<b>Session : Systems and Applications III</b>

	<p>VMFence: A Customized Intrusion Prevention System in Distributed Virtual Computing Environment Hai Jin, Guofu Xiang, Feng Zhao, Deqing Zou, Min Li, Lei Shi (Huazhong University, China)</p> <p>Host-based traceback; Tracking bot and C&amp;C server Keisuke Takemori, Masahiko Fujinaga, Toshiya Sayama, Masakatsu Nishigaki (KDDI Lab, Shizuoka University, Japan)</p> <p>Scalable Server System Based on Virtual Machine Duplication in Wide Area Yuko Kamiya, Toshihiko Shimokawa, Norihiko Yoshida (Kyushu Sangyo University, Saitama University, Japan)</p> <p>A Multimodality Image Registration Framework for Synchronous Visualization of Radiotherapy Plans with Longitudinal Imaging Studies Chang-Yu Wang, Tsair-Fwu Lee, Chun-Hsiung Fang (National Kaohsiung University of Applied Sciences, Department of Radiation Oncology, Chang Gung Memorial Hospital-Kaohsiung Medical Center, Chang Gung University of Medicine, Taiwan)</p> <p>A Cost-Effective Embedded Scheme for a Fiber Monitoring System Hao-Lee Lin, Wen-Ping Chen, Wen-Shyang Hwang (National Kaohsiung University of Applied Sciences, Taiwan)</p> <p>The Plasma Free Space Optical Model for Ubiquitous Systems Brian J. d'Auriol, Yu Niu, Sungyoung Lee, Youngkoo Lee (Kyung Hee University, Korea)</p> <p><b>Session: Data Analysis and Mining  </b></p> <p>A New Data Structure for Asynchronous Periodic Pattern Mining Jieh-Shan Yeh, Szu-Chen Lin (Providence University, China)</p> <p>Keyword Search Considering User's Preference in P2P Networks Tomomi Miyazaki, Toshiki Watanabe, Akimitsu Kanzaki, Takahiro Hara, Shojiro Nishio (Osaka University, Japan)</p> <p>Real Time Extraction of Related Terms by Bi-directional Lexico-syntactic Patterns from the Web Hiroaki Ohshima, Katsumi Tanaka (Kyoto University, Japan)</p> <p>An Efficient Clustering Framework for Relevant Web Information Okran Jeong, Sangwon Lee (Sungkyunkwan University, Korea)</p> <p>Efficient Serial Episode Mining with Minimal Occurrences Hideyuki Ohtani, Takuya Kida, Takeaki Uno, Hiroki Arimura (Hokkaido University, National Institute of Informatics, Japan)</p> <p>A Recommendation Method Considering User's Time Series Contexts Kenta Oku, Shinsuke Nakajima, Jun Miyazaki, Shunsuke Uemura, Hirokazu Kato (Nara Institute of Science and Technology, Kyoto Sangyo University, Japan)</p> <p>XML Data Partitioning Strategies to Improve Parallelism in Parallel Holistic Twig Joins Imam Machdi, Toshiyuki Amagasa, Hiroyuki Kitagawa (University of Tsukuba, Japan)</p>
12:40~2:00	Lunch
2:00~3:45	<p><b>Session : Signal Processing &amp; OFDM</b></p> <p>Decentralized Dynamic Sub-channel Assignment for OFDMA-based Adhoc Networks Operating in TDD Mode Van Duc Nguyen, Huu Thanh Nguyen, Van Tien Pham (Hanoi University of Technology, Vietnam)</p> <p>Cyclic Delay Diversity for V-BLAST OFDM System Kwangyoon Kim, Jinyoung Kim (Kwangwoon University, Korea)</p> <p>Blind Equalization based on PDF Distance Minimization</p>

	<p>Namyong Kim, Kyuhwa Jeong, Liuqing Yang (Kangwon National University, Intel Corporation, University of Florida, Korea, U.S.A.)</p> <p>Noise Insensitive Sampling Frequency Offset Estimation Methods for DVB-T/H Systems Kyunghoon Won, Jungsu Han, Hyungjin Choi, Bonyoung Koo (Sungkyunkwan University, Samsung Electro-Mechanics CO., LTD., Korea)</p> <p>New Schemes of Carrier Frequency Offset Estimation for DVB Systems Youngyoon Lee, Taeung Yoon, Sanghun Kim, Seokho Yoon (Sungkyunkwan University, Korea)</p> <p>An Enhanced ECCM Method using OFCDM in Wibro System Myungjin Chung, Jungsu Han, Hyungjin Choi, Seokjoong Kim (Sungkyunkwan University, Samsung Thales Co. LTD., Korea)</p> <p>An Area Reduction Method for Digital Filter using Redundancy of SD number system Sanghun Yoon, Jindoo Jeong, Jongwha Chong (Hanyang University, Korea)</p> <p>A New Filtering Method for chirp spread spectrum Yeongsam Kim, Jongwha Chong (Hanyang University, Korea)</p> <p>Peak Power Control Algorithm for Multi-Processor SoC JaeHwan Kim, SungHwan Park, JongWha Chong (Hanyang University, Korea)</p> <p><b>Session : Systems and Applicatalons IV</b></p> <p>Representative Slice Method for Viscous Fluid Registration of Three-Dimensional Whole-Body Human Images Soichiro Tokuhisa, Kunihiko Kaneko (Kyushu University, Japan)</p> <p>A Differential Evolution Approach for Multiple Campaign Assignment Problem to Enhance E-readiness of a Nation Lopamudra Pradhan, Bibhuti B. Mohapatra, Satchidananda Dehuri, Abhya Kumar Panda (Fakir Mohan University, Yonsei University, India, Korea)</p> <p>Developing Embodied Agent-based User Interface by Using Interactive Drama Markup Language Zeng-Wei Hong, Kai-Yi Chin, Jim-Min Lin (Asia University, Feng Chia University, Taiwan)</p> <p>Exploiting Idle CPU Cores to Improve File Access Performance Takanori Ueda, Yu Hirate, Hayato Yamana (Waseda University, Japan)</p> <p>A Credibility Analyzing Method of Geographical Objects from Digital Maps Daisuke Kitayama, Ryong Lee, Kazutoshi Sumiya (University of Hyogo, Japan)</p> <p>MDS : A Novel Method for Class Imbalance Learning Long-Sheng Chen, Chun-Chin Hsu, Yu-Shan Chang (Chaoyang University of Technology, Taiwan)</p> <p>Real-valued Feature Indexing for Music Databases Yu-lung Lo, Ling-yi Tsai (Chaoyang University of Technology, Taiwan)</p>
3:45~4:00	Break
4:00~6:00	<p><b>Session : Sensor Networks</b></p> <p>A Lightweight Key Renewal Scheme for Clustered Sensor Networks Gicheol Wang, Deokjai Choi, Daewook Kang (Chonnam University, Korea)</p> <p>Reporter node determination of replicated node detection in wireless sensor networks Yuichi Sei, Shinichi Honiden (The University of Tokyo, National Institute of Informatics, Japan)</p> <p>Localization of the Mobile Agent using Indirect Kalman Filter in Distributed Sensor Networks Jiwook Kwon, Munsoo Park, and Dongkyoung Chwa</p>

(Ajou University, Korea)

Energy Efficient Filtering Method in Sensor Networks

Sooyoung Moon, Taeho Cho

(Sungkyunkwan University, Korea)

An m-EVBT Algorithm for Energy Efficient Routing in Wireless Sensor Networks

Jaekwang Kim, Kwangho Yoon, Seunghoon Lee, Je-hee Jung, Jee-Hyong Lee

(Sungkyunkwan University, Korea)

An Anti-Collision Algorithm without Idle Cycle using 4-ary Tree in RFID System

Yonghwan Kim, Sungsoo Kim, Seongjoon Lee, Kwangseon Ahn

(Kyungpook National University, Korea)

Adaptive Threshold Determination Method for the Dynamic Filtering in Wireless Sensor Networks Using Fuzzy Logic

Sangjin Lee, Haeyoung Lee, Taeho Cho

(Sungkyunkwan University, Korea)

Energy Consumption Analysis of Reputation-based Trust Management Schemes of Wireless Sensor Networks

Riaz Ahmed Shaikh, Youngkoo Lee, Sungyoung Lee

(Kyung Hee University, Korea)

### **Session : Systems and Applications V**

An Efficient Method of Image Identification by Combining Image Features

Jaekyong Jeong, Chijung Hwang, Byeungwoo Jeon

(SungKyunKwan University, Chungnam National University, Korea)

Performance Testing based on Test-Driven Development for Mobile Applications

Heejin Kim, Byoungju Choi, Seokjin Yoon

(Ewha Womans University, ETRI, Korea)

A Framework of Sensor - Cloud Integration Opportunities and Challenges

Mohammad Mehedi Hassan, Biao Song, Eui-Nam Huh

(Kyung Hee University, Korea)

Analysis on Quantum-Based Fixed Priority Scheduling of Real-Time Tasks

Moonju Park, Hongjin Yoo, Jinseok Chae

(University of Incheon, Korea)

An E-Learning Framework Supporting Personalization and Collaboration

Jihyun Kim, Yujung Jung, Yoonsun Lim, Myung Kim, Sunsook Noh

(Ewha womans university, Korea)

Virtual Community 101 : Know Your Virtual Community and Members

Eunyoung Cheon, Joongho Ahn

(Seoul National University, Korea)

### **Session: Data Analysis and Mining II**

A Statistical Analysis of Relation Degree of Compound Pair on Online Biological Pathway Databases

Myungha Jang, Arang Rhie, Jiyoung Whang, Sanduk Yang, Hyun S. Park

(Ewha Womans University, Korea)

PicAChoo: A Tool for Customizable Feature Extraction Utilizing Characteristics of Textual Data

Jaeseok Myung, Jungyeon Yang, Sang-goo Lee

(Seoul National University, Korea)

Mining High Utility Patterns in Incremental Databases

Chowdhury Farhan Ahmed, Syed Khairuzzaman Tanbeer, Byeongsoo Jeong, Youngkoo Lee

(Kyung Hee University, Korea)

A Clustering Algorithm Using Particle Swarm Optimization for DNA Chip Data Analysis

Minsoo Lee, Yoonkyoung Lee, Boyeon Meang, Okju Choi

(Ewha womans university, Korea)

Activity Recognition with the Aid of Unlabeled Samples

Donghai Guan, Youngkoo Lee, Sungyoung Lee

(Kyung Hee University, Korea)