

December 14, 2012

Workshop on Mobile Computing, Wireless Communications, and Vehicular Technologies

Date: Friday, 14 Dec. 2012

Room: 3F 305.306.307

Session: Wireless Sensor Networks (09:30~11:30 am)

Chair: **Prof. Jen-Yeu Chen**, National Dong Hwa University

- 1020 Merging Grid into Clustering-based Routing Protocol for Wireless Sensor Networks
Ying-Hong Wang, Yu-Wei Lin, Yu-Yu Lin, and Hang-Ming Chang
- 1036 CDTS: Coordinator Data Traffic Shunt model for Zigbee networks
Chinyang Henry Tseng, Shaihuey Wang, Bor-Shing Lin, Tong-Ying Juang, and Xiao-Ru Ji
- 1039 A Zone-Based Localization Scheme for Wireless Sensor Networks with Bilateralation
Chi-Chang Chen, Chi-Yu Chang, and Yan-Nong Li
- 1069 IARC-An Improved Coverage Based Sensor Network Topology Control Algorithm
Wei-Jun Lin, Tsen-Jui Lin, and Lei Wang
- 1185 Coverage Improvement for Directional Sensor Networks
Tien-Wen Sung and Chu-Sing Yang
- 1191 Design and Analysis of Hybrid Wireless Mesh Networks for Smart Grids
Philip Huu Huynh and C. Edward Chow
- 1164 Coding Scheme Improved Query Efficiency of Hierarchical MIIS Servers with Cache in Heterogeneous Networks
Pei-Chen Tseng, Jai-Yan Tsai, and Wen-Shyang Hwang
- 1183 Message Relaying with Data Aggregation for Drive-Thru Internet Services in Vehicular Networks
Chih-Lin Hu, Chung-Chun Wang, and Jiun-Yu Tu

Session: Wireless Ad Hoc Networks (1:00~2:30 pm)

Chair: **Prof. Yao-Chung Chang**, National Taitung University

- 1052 Improving Pairwise Key Predistribution in Wireless Sensor Networks
Neng-Chung Wang and Hong-Li Chen
- 1207 Integration of EPC and wireless sensor networks for heterogeneous networking in a U-life environment
Yao-Chung Chang
- 1017 UDP Based Reliable File Delivery Mechanisms for Video Streaming over Unstable Wireless Networks
Shih-Ying Chang, Xin-Yan Yeh, Hsin-Ta Chiao, and Hung-Min Sun
- 1055 Medium Access Control with SDMA for Wireless Ad Hoc Networks
Neng-Chung Wang and Yu-Chun Huang
- 1104 Game Theoretical Cooperative Resource Allocation for Broadcasting in Cognitive Radio Networks

Hsin-Chun Wu, Shuo-Cheng Hu, and Ai-Chun Pang

- 1121 A Cluster-based Link Recovery Mechanism for Spectrum Aware On-demand Routing in Cognitive Radio Ad Hoc Networks
Chih-Chieh Tang, Kuo-Feng Ssu, and Chun-Hao Yang

Session: Wireless Protocols Design (2:45~4:15 pm)

Chair: **Prof. Chia-Hui Huang**, National Taipei College of Business

- 1120 Design and Implementation of a Software Development Kit for LLRP Readers
Yu-Shin Chang, Sheng-Pang Kuo, and Chua-Huang Huang
- 1170 A Flow-Aware Placement of Mobile Agent Control Network over Opportunistic Networks
Hsiao-Tzu You, Yao-Nan Lien, and Jyh-Shyan Huang
- 1177 Achieving Weighted Fairness for High Performance Distributed Coordination Function with QoS Support in WLANs
Yeong-Sheng Chen, Fan-Chun Tseng, and Chih-Heng Ke
- 1182 A Cross-Layer Design for Energy Efficient Sleep Scheduling in Uplink Transmissions of IEEE 802.16 Broadband Wireless Networks
Jen-Jee Chen, Shih-Lin Wu, and Wei-Yu Lin
- 1044 The Universal Local IP Access for Small Cells
Yung-Chun Lin and Chai-Hien Gan
- 1061 Implementation of Radar Map Using GPS in Vehicular Networks
Chun-I Kuo, Po-Ching Wang, Chih-Hsun Lin, Ce-Kuen Shieh, and Ming-Fong Tsai

Workshop on Image Processing, Computer Graphics, and Multimedia

Date: Friday, 14 Dec. 2012

Room: 3F 315.316.317

Session: Pattern Recognition and Object Tracking (09:30~11:30 am)

Chair: **Prof. Chung-Lin Huang**, National Tsing Hua University

- 1041 A Study of Real-Time Hand Gesture Recognition Using Sift on Binary Images
Wei-Syun Lin, Yi-Leh Wu, Wei-Chih Hung, and Cheng-Yuan Tang
- 1133 Facial Expression Recognition Using Image Processing Techniques and Neural Networks
Hsi-Chieh Lee, Chia-Ying Wu, and Tzu-Miao Lin
- 1138 Search Space Reduction in Pedestrian Detection for Driver Assistance System Based on Projective Geometry
Karlis Dimza, Te-Feng Su, and Shang-Hong Lai
- 1153 Fast Multi-Path Motion Estimation Algorithm with Computation Scalability
Kuang-Han Tai, Gwo-Long Li, Mei-Juan Chen, and Haw-Wen Chi
- 1158 Moving Objects Detection based on Hysteresis Thresholding
Hsiang-Erh Lai, Chih-Yang Lin, Ming-Kai Chen, Li-Wei Kang, and Chia-Hung Yeh
- 1161 Smart Video Camera Design -- Real-Time Automatic Person Identification

Chen-Ting Ye, Tzung-Dian Wu, You-Ren Chen, Pei-An He, Pei-Qi Xie, Yuan-Yi Zhang, Shih-Meng Teng, Yen-Ting Chen, and Pao-Ann Hsiung

1197 Identifying Device Brand by Using Characteristics of Color Filter Array

Tang-You Chang, Guo-Shiang Lin, and Shen-Chuan Tai

1194 Free View Point Real-time Monitor System Based On Harris-SURF

Tzu-Ti Chang, Fang-Yi Yu, Wei-Tsong Lee, Feng-Yu Chang, and Jason Wu

Session: Object Identification and Multimedia Applications (1:00~2:30 pm)

Chair: **Prof. I-Cheng Chang**, National Dong Hwa University

1105 An approach for mouth localization using face feature extraction and projection technique

Hui-Yu Huang and Yan-Ching Lin

1014 Construction of a Machine Guide Dog Using a Two-mirror Omni-camera and an Autonomous Vehicle

Chih-Wei Huang and Wen-Hsiang Tsai

1015 Protection of Privacy-sensitive Contents in Surveillance Videos Using WebM Video Features

Hsin-Hsiang Tseng and Wen-Hsiang Tsai

1186 A High Performance Parallel Graph Cut Optimization for Depth Estimation

Bo-Yen Chen and Bo-Cheng Charles Lai

1155 3D Spinal Cord and Nerves Segmentation from STIR-MRI

Chih Yen, Hong-Ren Su, Shang-Hong Lai, Kai-Che Liu, and Ruen-Rone Lee

1144 Significance-Preserving-Guided Content-Aware Image Retargeting

Yu-Hsien Sung, Wen-Yu Tseng, Pao-Hung Lin, Li-Wei Kang, Chih-Yang Lin, and Chia-Hung Yeh

Session: Image Processing and Video Coding (2:45~4:15 pm)

Chair: **Prof. Chua-Huang Huang**, Feng Chia University

1079 Comprehensive Evaluation for HE Based Contrast Enhancement Techniques

Ming-Zhi Gao, Zhi-Gang Wu, and Lei Wang

1198 Robust Video Copy Detection based on Constrained Feature Points

Duan-Yu Chen and Yu-Ming Chiu

1047 A Mass Detection System in Mammograms Using Gray Level Co-occurrence Matrix and Optical Density Features

Shen-Chuan Tai, Zih-Siou Chen, Wei-Ting Tsai, Chin-Peng Lin, and Dr. Li-li Cheng

1125 Automatic Evaluation of Choroidal Neovascularization in Fluorescein

Kai-Shun Lin, Chia-Ling Tsai, Shih-Jen Chen, and Wei-Yang Lin

1050 Speeding up the Decisions of Quad-Tree Structures and Coding Modes for HEVC Coding Units

Shen-Chuan Tai, Chia-Ying Chang, Bo-Jhih Chen, and Jui-Feng Hu

1070 Optimal GOP Size of H.264/AVC Temporal Scalable Coding
Wei-Lune Tang and Shih-Hsuan Yang

Workshop on Algorithm, Bioinformatics, and Computation Theory

Date: Friday, 14 Dec. 2012

Room: 3F 308.309

Session: Graph Theory and Algorithms (09:30~11:30 am)

Chair: **Prof. Lih-Hsing Hsu**, Providence University

- 1163 An Upper Bound of the Rainbow Connection Number in RTCC Pyramids
Fu-Hsing Wang, Ze-Jian Wu, and Yann-Jong Hwang
- 1054 On the Hamiltonian-Connectedness for Graphs Satisfying Ore's Theorem
Shin-Shin Kao, Yuan-Kang Shih, and Hsun Su
- 1057 On Total Covers of Block-Cactus Graphs
Yu-Ting Li, Jia-Jie Liu, and Yue-Li Wang
- 1037 Randomized Self-Stabilization under Distributed Daemon for 6-Coloring Planar Graph
Chi-Hung Tzeng, Jehn-Ruey Jiang, Shing-Tsaan Huang, and Cheng-Feng Yeh
- 1042 An $O^*(1.4786n)$ -Time Algorithm for the Maximum Induced Matching Problem
Maw-Shang Chang, Ling-Ju Hung, and Chau-An Miao
- 1175 The Longest Path Problem on Distance-Hereditary Graphs
Yi-Lu Guo, Chin-Wen Ho, and Ming-Tat Ko
- 1208 Characterizing and Recognizing Probe Block Graphs
Van Bang Le and Sheng-Lung Peng

Session: Graph Theory and Bioinformatics (1:00~2:30 pm)

Chair: **Prof. Yue-Li Wang**, National Taiwan University of Science and Technology

- 1128 2-Rainbow Domination and Its Practical Variation on Weighted Graphs
Chung-Kung Yen
- 1028 Balancing a Complete Signed Graph by Editing Edges and Deleting Nodes
Bang Ye Wu and Jia-Fen Chen
- 1095 A New Filtration Method and a Hybrid Strategy for Approximate String Matching
Chia-Wei Lu, Chin-Lung Lu, and R. C. T. Lee
- 1134 A Novel Approximation Algorithm for Minimum Geometric Disk Cover Problem with Hexagon Tessellation
Chi-Chang Chen, Chi-Yu Chang, and Cheng-Chun Liu
- 1053 Protein Structure Comparison and Visualization Tools on Cloud Platform
Yaw-Ling Lin, Chen-En Hsieh, Guan-Jie Hua, and Che-Lun Hung

Session: Interconnection Networks and Combinatorial Algorithms (2:45~4:15 pm)

Chair: **Prof. Y-Chuang Chen**, Minghsin University of Science and Technology

- 1080 Ranking and Unranking Algorithms for Loopless Generation of Non-Regular Trees

Ro-Yu Wu, Jou-Ming Chang, An-Hang Chen, and Ming-Tat Ko

1081 Completely Independent Spanning Trees on Complete Graphs, Complete Bipartite Graphs and Complete Tripartite Graphs

Kung-Jui Pai, Shyue-Ming Tang, Jou-Ming Chang, and Jinn Shyong Yang

1046 On the Min-Max 2-Cluster Editing Problem

Li-Hsuan Chen, Maw-Shang Chang, Chun-Chieh Wang, and Bang Ye Wu

1127 Spatial Query Processing on Distributed Databases

Jiun-Wen Bai, Jun-Zhe Wang, and Jiun-Long Huang

1027 Internally Disjoint Paths in a Variant of the Hypercube

Tsung-Han Tsai, Y-Chuang Chen, and Jimmy J.M. Tan