

Technical Sessions

January 28, 2013 (Monday)

13:30 – 15:30

Session 1A

Network Security

[1A-1] Network Intrusion Detection with Fuzzy Genetic Algorithm for Unknown Attacks

P. Jongsuebsuk, N. Wattanapongsakorn (King Mongkut's University of Technology Thonburi, Thailand), and C. Charnsripinyo (National Electronics and Computer Technology Center, Thailand)

[1A-2] Multi-Photon Implementation of Three-Stage Quantum Cryptography Protocol

Sayonnhha Mandal, Gregory Macdonald, Mayssaa El Rifai, Nikhil Punekar, Farnaz Zamani (University of Oklahoma-Tulsa, USA), Yuhua Chen (University of Houston, USA), Subhash Kak (Oklahoma State University, USA), Pramode K. Verma, Robert C Huck, and James Sluss (University of Oklahoma-Tulsa, USA)

[1A-3] A Study on Stream Assignment Method for Secure MIMO Communication

Satoru Shimosaka, Kenta Umebayashi, and Yasuo Suzuki (Tokyo University of Agriculture and Technology, Japan)

[1A-4] An Enhanced Measurement Transmission Scheme for Privacy Protection in Smart Grid

Shi Li, Kyung Choi, and Kijoon Chae (Ewha Womans University, Korea)

[1A-5] A Holistic Immune System Against Active P2P Worms

Eng Keong Lua (Monash University, Australia), and Ruichuan Chen (Bell Labs, Alcatel-Lucent, Germany)

[1A-6] Detecting Protected Links to Keep Reachability to Server against Failures

Koji Imagawa, and Hiroyoshi Miwa (Kwansei Gakuin University, Japan)

Session 1B

Sensor Networks

[1B-1] QRMSC: Efficient QoS-Aware Relay Node Placement in Wireless Sensor Networks using Minimum Steiner Tree on the Convex Hull

Sookyong Lee, and Meejeong Lee (Ewha Womans University, Korea)

[1B-2] Movement Path Estimation for Multiple Humans in a Room using Binary Infrared Sensors

Yuki Kasama, and Toshiaki Miyazaki (The University of Aizu, Japan)

[1B-3] Latency Aware Broadcast Scheduling in Duty Cycle Wireless Sensor Network

Duc Tai Le, Thang Le Duc (Sungkyunkwan University, Korea), Vyacheslav V. Zalyubovskiy (Sobolev Institute of Mathematics, Russia), and Hyunseung Choo (Sungkyunkwan University, Korea)

[1B-4] Information Discovery in Multidimensional Wireless Sensor Networks

Menik Tissera, Robin Doss, Gang Li, and Lynn Batten (Deakin University, Australia)

[1B-5] Game Theory for Misbehaving Detection in Wireless Sensor Networks

Imedline Ben Abid, and Noureddine Boudriga (University of Carthage, Tunisia)

[1B-6] Improved DOA Estimation of Correlated Signals in Correlated Antenna Noises Environment

Ill-Keun Rhee, and Hee-Soo Kim (Hannam University, Korea)

15:45 – 17:45

Session 2A

Routing, Switching and Addressing

[2A-1] Potential Based Routing in B-P2i- Architecture

Menghan Li, Xiaoping Zhang, Yupeng Tian, and Haixiang Zhang (Tsinghua University, China)

[2A-2] A Trust-based Routing Strategy in Structured P2P Overlay Networks

Yang Han, Keiichi Koyanagi (Waseda University, Japan), Takeshi Tsuchiya, Tadashi Miyosawa, and Hiroo Hirose (Tokyo University of Science, Suwa, Japan)

[2A-3] Energy-Efficient Flow Control and Routing for Clustered Wireless Sensor Networks

Soo-Hoon Moon, Seung-Jae Han, and Sunju Park (Yonsei University, Korea)

[2A-4] Multi-metric Geo-Routing protocol for Tactical Ad Hoc Networks

Hyochun Ahn, Youn Seo, Jaebeom Kim, Young-Bae Ko (Ajou University, Korea), Cheolhyo Lee, and Chang-Joo Kim (Electronics and Telecommunications Research Institute, Korea)

[2A-5] Implementation and Validation of an Address Resolution Mechanism using Adaptive Routing

Sebastian Schellenberg, Peggy Begerow, Markus Hager, Jochen Seitz (Ilmenau University of Technology, Germany), Thomas Finke, and Juergen Schroeder (Heilbronn University, Germany)

Session 2B

Mobile Networks

[2B-1] Stable Multicast Trees based on Ant Colony Optimization for Vehicular Ad Hoc Networks

Alisson B. Souza, Joaquim Celestino Júnior, Felipe A. Xavier, Francisco D. Oliveira (State University of Ceara (UECE), Brazil), Ahmed Patel, and Maryam Latifi (Universiti Kebangsaan Malaysia, Malaysia)

[2B-2] Distributed Mobility Management in Proxy Mobile IPv6 using Hash Function

Ji In Kim, and Seok Joo Koh (Kyungpook National University, Korea)

[2B-3] Real-Time Traffic Control for Multihomed Devices

Tapio Frantti (Renesas Mobile Europe (RME) Ltd., Finland), and Mikko Majanen (VTT Technical Research Centre of Finland, Finland)

[2B-4] Mobile Content Distribution and Selective Traffic Offload in the 3GPP Evolved Packet System (EPS)

Nicholas Katanekwa, and Neco Ventura (University of Cape Town, South Africa)

[2B-5] PMIPv6-based Make-before-break Handover for Real-time Services in 3GPPs Evolved Packet Core

Charna John, Sibonelo Madlopha, and Neco Ventura (University of Cape Town, South Africa)

[2B-6] Service Engagement Model for Mobile Advertising Based on User Behavior

Arto Kaasinen, and Yong-Ik Yoon (Sookmyung Women's University, Korea)

January 29, 2013 (Tuesday)

09:00 – 11:00

Session 3A

Implementation, Measurement and Performance Analysis

[3A-1] Implementation of Open Two-Factor Authentication Service applied to Virtual Private Network

Pham Ngoc Thanh, and Keecheon Kim (Konkuk University, Korea)

[3A-2] End-to-End Performance Analysis based on Cross-Layer Retransmission Scheme in Wireless Communication System

Kwang-Chun Go, Jae-Ryong Cha, Seong Keun Oh, and Jae-Hyun Kim (Ajou University, Korea)

[3A-3] End-to-end Delay Analysis Method for Tandem Switches with Variable Bandwidth Links

Osamu TAKADA (Hitachi, Ltd., Japan), Kohta OHSHIMA, and Matsuaki TERADA (Tokyo University of Agriculture and Technology, Japan)

[3A-4] Performance Evaluation of Synchronous Distributed Wireless Network Emulator for High-Speed Mobility

Tomoaki Tsutsumi, Minoru Koizumi (Tokyo University of Agriculture and Technology, Japan), Tomoichi Ebata, Kohta Ohshima, and Matsuaki Terada (Hitachi, Ltd., Japan)

[3A-5] FPGA Implementation of Human Emotion Reasoning Engine

Kwang-Soon Choi, Young-Choong Park, Byoung-Ha Park, Sung-Hee Hong, and Kwang-mo Jung (Korea Electronics Technology Institute, Korea)

Session 3B

Cognitive Radio and Wireless Networks

[3B-1] Optimal Network Selection Coordination in Heterogeneous Cognitive Radio Networks

Tuan LeAnh, Mui Van Nguyen, Cuong T. Do, Choong Seon Hong, Sungwon Lee (Kyung Hee University, Korea), and Jin Pyo Hong (Hankook University of Foreign Studies, Korea)

[3B-2] Deterministic Time Pattern based Channel Selection in Cognitive Radio Network

Vishram Mishra, Lau Chiew Tong, and Chan Syin (Nanyang Technological University, Singapore)

[3B-3] An Evolution-Inspired Algorithm for Efficient Dynamic Spectrum Selection

Camila S. Barbosa (Federal University of Goiás (UFG), Brazil), Vinicius C. M. Borges (University of Coimbra (UC), Portugal), Sand Correa, and Kleber V. Cardoso (Federal University of Goiás (UFG), Brazil)

[3B-4] An Efficient Blind Turbo Equalizer for Compensating Doppler Effects

Do-Hoon Kim, and Heung-Gyoon Ryu (Chungbuk National University, Korea)

[3B-5] An Approach with Two-Stage Mode to Detect Cache-based Side Channel Attacks

Si Yu, Xiaolin Gui, and Jiancai Lin (Xi'an Jiaotong University, China)

[3B-6] A Green Rate-and-Power Control Transmission Scheme in Multi-Carrier Base Stations

Yao-Liang Chung (National Taipei University, Taiwan)

11:15 – 12:15

Session 4A

Mesh Networking

[4A-1] Dual-Radios Hypermesh Network based on CSMA Protocol

Nuredin Ali Salem Ahmed (Azzaytuna University, Libya), Adel Emhemmed (Triploli University, Libya), and Khaled Elgaid (University of Glasgow, United Kingdom)

[4A-2] An Adaptive Probe Selection Mechanism for k-Link Fault Diagnosis on All-Optical Mesh Networks

Chi-Shih Chao, and Szu-pei Lu (Feng Chia University, Taiwan)

[4A-3] Requirements of Secure WSN-MCN Edge Router

Tapio Frantti, Hannu Hietalahti (Renesas Mobile Europe (RME) Ltd., Finland), and Reijo Savola (VTT Technical Research Centre of Finland, Finland)

Session 4B

Wireless Networking

[4B-1] A Cooperative TDMA MAC Protocol using Dynamic Slot Assignment Scheme

Jong-kwan Lee, Hong-Jun Noh, and Jaesung Lim (Ajou University, Korea)

[4B-2] Border Surveillance using sensor based thick-lines

Ramzi Bellazreg, Nouredine Boudriga (University of Carthage, Tunisia), and Sunshin An (Korea University, Korea)

13:15 – 15:15

Session 5A

Cloud Computing

[5A-1] An Enhanced Approach for Estimating Writable Working Set by Pre-copy and Prediction

Tin-Yu Wu (National Ilan University, Taiwan), Wei-Tsong Lee, Jih-Siang Huang, Chien-Yu Duan (Tamkang University, Taiwan), and Tain-Wen Suen (Chung-shan Institute of Science and Technology, Taiwan)

[5A-2] A Novel Approach for Developing Interoperable Services in Cloud Environment

Binh Minh Nguyen, Viet Tran, and Ladislav Hluchy (Slovak Academy of Sciences, Slovakia)

[5A-3] A Solution of Thin-Thick Client Collaboration for Data Distribution and Resource Allocation in Cloud Computing

Pham Phuoc Hung (Kyung Hee University, Korea), Bui Tuan-Anh (Hanoi University, Vietnam), and Eui Nam Huh (Kyung Hee University, Korea)

[5A-4] Design and Performance Evaluation for Hadoop Clusters on Virtualized Environment

Masakuni Ishii, Jungkyu Han, and Hiroyuki Makino (Nippon Telegraph and Telephone Corporation, Japan)

[5A-5] A Study of Secure Data Transmissions in Mobile Cloud Computing From the Energy Consumption Side

Jin-A Hong, Sangmin Seo, Namgi Kim, and Byoung-Dai Lee (Kyonggi University, Korea)

Session 5B

Wireless Communications I

[5B-1] A Study on Switching Symbol Timing Detection Method for Continuous OFDM Signals

Kenko Ota (Tokyo University of Science, Suwa and Nippon Institute of Technology, Japan), Kohei Miyasaka, Takaharu Nagahashi (Tokyo University of Science, Suwa, Japan), Yoshio Nogami, Shunichi Tada (SYSTEC RESEARCH INC., Japan), and Hideaki Matsue (Tokyo University of Science, Suwa, Japan)

[5B-2] Alternate Time-Switched Multiplexed Space-Time Block Coding technique for single-carrier modulation

Hyeok Koo Jung (Hanbat National University, Korea)

[5B-3] A Study on Detection Method of Same Spreading Code Signals by Multimodulus Algorithm

Genichiro Murata, Kenta Umabayashi, and Yasuo Suzuki (Tokyo University of Agriculture and Technology, Japan)

[5B-4] Design of Modified Sierpinski Fractal Based Miniaturized Patch Antenna

Sika Shrestha, Seung-Jo Han (Chosun University, Korea), Sun-Kuk Noh (Chosun College of Science and Technology, Korea), Sunwoong Kim, Hyun-Bai Kim, and Dong-You Choi (Chosun University, Korea)

[5B-5] Cooperation through Secondary Relaying in TDMA Cellular Networks

YoungJu Hwang, and Seong-Lyun Kim (Yonsei University, Korea)

[5B-6] A Distributed Quasi-Orthogonal Space Time Block Code for Cooperative Communication with Information Exchange Errors for Decode-and-Forward Relay Networks

Shu-Ming Tseng (National Taipei University of Technology, Taiwan), Yueh-Teng Hsu (Liteon Corp., Taiwan), and Shiou-heng Ren (National Taipei University of Technology, Taiwan)

15:30 – 17:30

Session 6A

Internet, Applications and Service Management

[6A-1] Inter-domain Connection of RELOAD-based Peer-to-Peer Overlays

Joscha Schneider, Eckhart Körner (University of Applied Sciences Mannheim, Germany), and Lothar Grimm (T-Systems International GmbH, Germany)

[6A-2] A Fuzzy Cache Lifetime Determination Scheme for LISP Mapping Systems

Sheng-Chang Chen, Chung-Ju Chang (National Chiao Tung University, Taiwan), and Yu-Huang Chu (Chunghwa Telecommunication Labs, Taiwan)

[6A-3] Approach for Service Search and Peer Selection in P2P Service Overlays

Adriano Fiorese (University of the State of Santa Catarina, Brazil), Paulo Simões, and Fernando Boavida (University of Coimbra, Portugal)

[6A-4] Application of Genetic Algorithm for Logistics Based on Multi-Agent System

Ho Kuen Song, Kwang Myung Kim, Kyung Tae Kim, and Hee Yong Youn (Sungkyunkwan University, Korea)

[6A-5] Threat of DoS by Interest Flooding Attack in Content-Centric Networking

Seungoh Choi, Kwangsoo Kim, Seongmin Kim, and Byeong-hee Roh (Ajou University, Korea)

[6A-6] Contents sharing using PPSP in DLNA-Based Networks

Hyunwoo Nam, and Younghan Kim (Soongsil University, Korea)

Session 6B

Wireless Communications II

[6B-1] Hybrid Spectrum Sharing in Dynamic Spectrum Access Networks

Sabari Somasekharan Nair, Sebastian Schellenberg, jochen Seitz (Ilmenau University of Technology, Germany), and Mainak Chatterjee (University of Central Florida, USA)

[6B-2] Alternating Renewal Framework for Estimation in Spectrum Sensing Policy and Proactive Spectrum Handoff

Thant Zin Oo, Choong Seon Hong, and Sungwon Lee (Kyung Hee University, Korea)

[6B-3] Pre- and Post- Equalization Technique Combining for Wireless Communications

Suriya Kanthalue (Dhurakij Pundit University, Thailand), Pheeradej Nanan (CAT Telecom Public Company Limited, Thailand)

[6B-4] A Threshold-based Frequency Offset Estimation Scheme for OFDM Systems

Youngpo Lee, Jaewoo Lee, Youngseok Lee, Jeongyoon Shim, and Seokho Yoon (Sungkyunkwan University, Korea)

[6B-5] An Adaptive Channel Number Tuning Mechanism on Parallel Transfer with UDT

Jongseon Park, Dosik An, and Gihwan Cho (Chonbuk National University, Korea)

January 30, 2013 (Wednesday)

09:30 – 11:30

Session 7B

QoS and Resource Management

[7B-1] QoS-aware Hierarchical Token Bucket (QHTB) Queuing Disciplines for QoS-guaranteed DiffServ Provisioning with Optimized Bandwidth Utilization and Priority-based Preemption

Chang-Hwan Lee, and Young-Tak Kim (Yeungnam University, Korea)

[7B-2] PACS Metric based on Regression for Evaluating End-to-End QoS Capability over the Internet for Telemedicine

Sanon Chimmanee (Rangsit University, Thailand)

[7B-3] Transformation based Low Complexity Algorithm for Nash Bargaining Solutions in Dynamic Networks

Eunhye Choi, and Hyunggon Park (Ewha Womans University, Korea)

[7B-4] VoIP Call Admission Control Scheme Considering VoIP on-off patterns

Ji-Young Jung, Dong-Yoon Seo, and Jung-Ryun Lee (Chung-Ang University, Korea)

[7B-5] Time Synchronization Protocol in Ad hoc network

Yun-Jae Shin, and Jung-Ryun Lee (Chung-Ang University, Korea)

[7B-6] Price-based Tethering for Cooperative Networking

Jisub Lee, Chenglong Shao, Heejun Roh, and Wonjun Lee (Korea University, Korea)