

# **2012 IEEE International Conference on Communication, Networks and Satellite**

**(ComNetSat 2012)**

**Bali, Indonesia  
12 – 14 July 2012**



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## TECHNICAL PROGRAM

July 12, 2012

**KEYNOTE SPEECH**

**Convergence of Communications towards Smart Era**  
Prof. Byeong Gi Lee

July 14, 2012

**PLENARY SPEECH**

**Cognitive Radio Networks: Design Issues and Security Threats**  
Prof. Pramod K. Varshney

**Room A**

**July 13, 2012**  
**09.00 - 10.30**

**CT1.1: Internet Computing**

**CT1.1.1 Auction-based vs. Incentive-based Multiple-Cloud Orchestration Mechanisms**

Ganesh Neelakanta Iyer, Ramkumar Chandrasekaran, Bharadwaj Veeravalli  
*National University of Singapore*

**CT1.1.2 Efficient Normal Peers Group Recovery in Hierarchical Peer-To-Peer**

Sri Wahjuni, Kalamullah Ramli, Anak Agung Putri Ratna  
*University of Indonesia*

**Room B**

**July 13, 2012**  
**10:45 - 12:00**

**CT2.1: Mobile & Wireless Broadband**

**[CT2.1.1](#) Sum Rate Maximization for Spectrum Sharing Multiuser MIMO Network under Rayleigh Fading**

Jie Tang, Georgia Bournaka, Sangarapillai Lambotharan  
*Loughborough University*

**[CT2.1.2](#) Mitigating Sybil Attacks in Vanets 1 \$**

Khaled Mohamed Rabieh, Marianne Azer, Mahmoud Allam  
*Nile University*

**[CT2.1.3](#) Blind Spectrum Sensing for Cognitive Radio**

Kris Sujatmoko, Gunawan Wibisono, Dadang Gunawan  
*University of Indonesia*

**[CT2.1.4](#) A Taxonomy for Congestion Control Algorithms in Vehicular Ad Hoc Networks**

Mohammad Reza Jabbarpour Sattari, Rafidah Md Noor, Hassan Keshavarz  
*University of Malaya*

**[CT2.1.5](#) Adaptive Beamforming Schemes for SC-FDMA Systems with Insufficient Cyclic Prefix**

Shiuan-Wei Huang, Kuo-Ching Fu, Yung-Fang Chen  
*Department of Communication Engineering, National Central University*

**[CT2.1.6](#) The Development of 3D Curve Dynamic Path Planning Simulation in Cluttered Environment**

T B Adji, Hendri H Triharminto, N A Setiawan, A S Prabuwono  
*Gadjah Mada University*

**Room A**

July 13, 2012  
10:45 - 12:00

**CT3.1: Quality, Security, and Management**

**[CT3.1.1](#) End User Based Measurement System For Cellular Packet Data Network Performance**

Zahir Zainuddin, Ady Wahyudi Paundu  
*Hasanuddin University*

**[CT3.1.2](#) Offline Delegation Protocol for Mobile RFID**

Jia-Ning Luo, Ming-Hour Yang, Ming-Chien Yang, Ming-Chi Tseng  
*Ming Chuan University*

**[CT3.1.3](#) A Searchable Encryption Scheme for Outsourcing Cloud Storage**

Jyun-Yao Huang, I-En Liao  
*Department of Computer Science and Engineering at National Chung Hsing University*

**Room B**

July 13, 2012  
13:30 - 15:00

**CT2.2: Mobile & Wireless Broadband****CT2.2.1 Performance Analysis of Open and Closed Loop Spatial Multiplexing in LTE Downlink Physical Layer**

Pooja S Suratia, Satish K Shah

*Department of Electrical Engineering, The Maharaja Sayajirao University of Baroda*

**CT2.2.2 Capacity Analysis of Device-to-Device Resource Reusing Modes for Cellular Networks**

Rui Chen, Xuewen Liao, Shihua Zhu, Zhonghua Liang

*Xi'an Jiaotong University*

**CT2.2.3 Mobile Geotagged Data Gathering for Disaster Remediation**

Sally Elizabeth Goldin, Kurt T Rudahl

*King Mongkut's University of Technology Thonburi*

**CT2.2.4 Time-Oriented Care-of Address for Mobile IPv6 Networks**

Yu-Hsin Cheng, Shang-Juh Kao, Fu-Min Chang

*Department of Information Networking and System Administration, Ling Tung University*

**CT2.2.5 An Efficient FemtoCell Deployment Scheme for Mitigating Interference in Two-tier Networks**

Hsiu-Lang Wang, Shang-Juh Kao

*Department of Computer Science and Engineering, National Chung-Hsing University*

**Room A**

July 13, 2012  
13:30 - 15:00

**CT4.1: Quality, Security, and Management****CT4.1.1 Detecting Policy Misconfigurations in Temporal Domain Using Object Priority**

Madhu Sankeerth Dammati, Samrat Mondal

*Indian Institute of Technology Patna*

**[CT4.1.2](#) Performance Evaluation of Available Bandwidth Estimation Tools in FTTH Networks**

Mun Leong Chan, Su Wei Tan, Ahmad Tajuddin Samsudin, Ahmad Fuad Mohamed Bandi  
*Multimedia University*

**[CT4.1.3](#) Analysis Against Secret Redundancy Mechanism for RFID Authentication Protocol**

N.W. Lo, Kuo-Hui Yeh, Hsuan-Yu Chen  
*Department of Information Management, National Taiwan University of Science and Technology*

**Room B**

July 13, 2012  
15:30 - 17:00

**CT1.2: Architecture & Protocols****[CT1.2.1](#) FPGA Implementation of ANN for Reactive Routing Protocols in MANET**

Satish K Shah, Dharmistha Doodhnath Vishwakarma  
*M.S.University of Baroda*

**[CT1.2.2](#) Credit-based Low Latency Packet Scheduling Algorithm for Real-time Applications**

Lyu-Han Chen, Hsiao-Kuang Wu, Ming-I Hsieh, Jorng-Tzong Horng, Gen-Huey Chen  
*National Central University*

**[CT1.2.3](#) Fault Notification Extension in Support of BSS 2G Siemens**

Linawati  
*Udayana University*

**[CT1.2.4](#) A Fast and Seamless Route Repairing Algorithm for Ad-hoc Networks**

Shih-Chang Huang  
*National Formosa University*

**Room A**

July 13, 2012  
15:30 - 17:00

**CT2.4: Mobile & Wireless Broadband**

**[CT2.4.1](#) High Isolation Compact WLAN/WiMAX Antenna**

Bing Yu, Junxiang Ge  
*Nanjing University of Information Science & Technology*

**[CT2.4.2](#) Differential BPSK Modulation for Cooperative Communication Systems in Time-Selective Rayleigh Fading Channels**

Chi-Hsiao Yih  
*Tamkang University*

**[CT2.4.3](#) An Efficient Cost-based Location Service Protocol for Vehicular Ad Hoc Networks**

Chih-Shun Hsu, Shen-Wen Wu  
*Department of Information Management, Shih Hsin University*

**[CT2.4.4](#) A Modified Low PAPR Space-Frequency Block Coding Scheme for SC-FDMA**

Chih-Yao Huang, Wei-Jay Chang, Li-Chung Chang  
*National Taiwan University of Science and Technology*

**[CT2.4.5](#) Ultra Low Profile Antenna for 2.45 GHz Wireless Communication**

Erfan Rohadi, Mitsuo Taguchi  
*Nagasaki University and State Polytechnic of Malang*

**[CT2.4.6](#) SINR Balancing Techniques for a Cognitive Radio Relay Network with Multiple Peer-to-peer Users**

Georgia Bournaka, Sangarapillai Lambotharan, Fotis Lazarakis  
*Loughborough University*

**Room C**

July 13, 2012  
15:30 - 17:00

**CT5.1: System & Applications****[CT5.1.1](#) Flu Incident Reporting on Mobile Phone**

Nichapa Panyasoponlert, Pawat Piboonudompornkul, Kurt T. Rudahl, Sally E. Goldin  
*King Mongkut's University of Technology Thonburi (KMUTT)*

**[CT5.1.2](#) Medical Image Watermarking with Tamper Detection and Recovery Using Reversible Watermarking with LSB Modification and Run Length Encoding (RLE) Compression**

Tjokorda Agung Budi Wirayuda, Adiwijaya, Febri Puguh Permana  
*Institut Teknologi Telkom*

**[CT5.1.3](#) Facial Expression Based Computer Cursor Control System for Assisting Physically Disabled Persons**

Vasanthan Maruthapillai, M. Murugappan, R. Nagarajan, Bukhari Ilias, Letchumikanth  
*University Malaysia Perlis*

**[CT5.1.4](#) Cloud Adaboost Feedback Training Machine for Outside Available Parking Spaces Query Service**

Jie-Qi Huang, Ming-Shi Wang  
*National Cheng Kung University Department of Engineering Science*

**Room A**

July 14, 2012  
10:45 - 12:00

**CT2.5: Mobile & Wireless Broadband**

**[CT2.5.1](#) An Overheard-Based Relay-Assisted MAC Protocol Using Symbol Level Network Coding**

Yuh-Shyan Chen, Chih-Shun Hsu, Jhao-Yen Wei  
*Department of Computer Science and Information Engineering, National Taipei University*

**[CT2.5.2](#) Joint Network/Channel Coding for Wireless Networks 1 \$**

Zid Youssef, Sonia Ammar, Ridha Bouallègue  
*NEST*

**[CT2.5.3](#) A Delay-Bounded Routing Protocol for Vehicular Ad Hoc Networks with Traffic Lights**

Yuh-Shyan Chen, Chih-Shun Hsu, Yi-Ting Jiang  
*Department of Computer Science and Information Engineering, National Taipei University*

**[CT2.5.4](#) A Comparison of Frequency/Amplitude Modulation Scheme in Cognitive Radio Environment**

Freeha Azmat, Junaid Imtiaz, Muhammad Hashim, Ithisham-ul-Haq, Malik Rizwan  
*Bahria University*

**Room B**

July 14, 2012  
10:45 - 12:00

**CT6.1: Satellite & Aerospace**

**[CT6.1.1](#) Bench Model Design of The Electrical Power System for linusat-1 NanoSatellite**

Arbai Yusuf, Gunawan Setyo Prabowo  
LAPAN

**[CT6.1.2](#) Examining Quantum Key Distribution Protocols in Laser Based Satellite Communications**

Laszlo Bacsardi, Andras Kiss, Mate Galambos, Sandor Imre  
*Department of Telecommunications, Budapest University of Technology and Economics*

**[CT6.1.3](#) Introduction of the liNUSAT Inter-Satellite Link System**

Arifin Nugroho, Nurwahidah Jamal, Suryadi Tanuwijaya  
ITTI