# 2012 Australasian **Telecommunication Networks and Applications Conference**

(ATNAC 2012)

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**ISBN**:

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#### Mobile and Wireless Networks I

Wed 7<sup>th</sup> NOV 9-12.30 pm

Subcarrier Pairing and Relay Assignment with Improved User Fairness in a Multi-user Cooperative OFDM System ÁF

Gayan Munasinghe; Anagiyaddage D. S. Jayalath

A Reliable Real-Time Transport Protocol for Control Systems Over Wireless Networks Alaohan Shi; Guosong Tian; Yu-Chu Tian

IP Address Associated 4-N Intelligent MANET Routing Algorithm Utilising LTE Cellular Technology ##FFFarukh Rahman; Mark A. Gregory

Ergodic Capacity of the Slotted Amplify and Forward Relay Channel with Finite Relays ÁFT Anushka Widanagamage; Anagiyaddage D. S. Jayalath; Yiyong Chin

Performance of Femtocell Access Point Deployments in User Hot-Spot Scenarios ÁG Martin Taranetz; Markus Rupp

Towards an Energy-Efficient Framework for Location-Triggered Mobile Application AMGJ Yemao Man; Yan Liu

Towards a Combined Traffic Modeling framework for Access and Core Networks Middle Muhammad Asad Arfeen; Krzysztof Pawlikowski; Don McNickle; Andreas Willig

A Lightweight Algorithm for Fast IEEE 802.11 Handover AAA G Przemysław Machań; Jozef Wozniak

#### **Mobile and Wireless Networks II**

Wed 7<sup>th</sup> NOV 13:30 – 17:00

A VANET Based Intelligent Road Traffic Signalling System ÁÁ Ì Nazmus Shaker Nafi; Jamil Y Khan

Evaluating the Performance Impact of Protocol Parameters on Ad-Hoc Network Routing Protocols Saaidal Azzuhri; Marius Portmann; Wee Lum Tan

Survey of Intercell Interference Mitigation Techniques in LTE Downlink Networks ÆÂ € Ameneh Daeinabi; Kumbesan Sandrasegaran; Xinning Zhu

Coffee/Tea Break 15:00 - 15:30

Fast and Reliable Target Base Station Selection Scheme for Mobile WiMAX Handover AAAÎÎ Sayan Kumar Ray; Harsha R Sirisena; Devatanu Deka

Cross Layer Optimization of VANET Routing with Multi-Objective Decision Making AAA G Ovitigalage Perera; Anagiyaddage D. S. Jayalath

Performance Evaluation of the Hostile Environment in Mobile Ad-hoc Network Á Ì Tamanna Afroze

#### **Emerging Networks I**

Wed 9th Nov 2011, 16:00 - 17:00 hrs

Efficient Route Update and Maintenance Processes for Multipath Routing in Large-Scale Industrial Wireless Sensor Networks: ", \* Lapas Pradittasnee; Yu-Chu Tian; Anagiyaddage D. S. Jayalath

Practical Issues in Building an Embedded Sensor Network Application Using 802.15.4: Linking Hardware & MAC Protocol: Mahir — & Meghji; Daryoush Habibi; Iftekhar Ahmad

Load Balancing Effect of Stochastic Routing in Wireless Sensor Networks ÁJ Udara Sadathana Wijetunge; André Pollok; Sylvie Perreau

#### Air Interfaces I

Wed 9th Nov 2011, 16:00 - 17:00 hrs

On Optimising the Capacity and Power Efficiency of a Wireless Network ÆF€Í Robert Hunjet; Andrew Coyle

Wireless Sensor Network Data Centric Storage Routing Using Castalia ##FGKhandakar Ahmed; Mark A. Gregory

A New WSN Paradigm for Environmental Monitoring and Data Collection ÁÆG€ Eric Dines

An XBee-Pro Based Energy Monitoring System ARG Xia Liu; Heping Chen; Mengliu Wang; Shanshan Chen

Energy-balance Routing for Wireless Sensor Networks with Scale-Free Characteristic ÁFHG Xiaohui Li

Section-Based Digital Habitat Ecosystem Architecture for the Built-up Environments AAFHÏ Kamatchi Pillai; Horace King; Cagil Ozansoy

## **Internet Technologies**

Thursday 8<sup>th</sup> NOV 14:30 – 17:00 pm

QoE Estimation and Prediction Using Hidden Markov Models in Heterogeneous Access Networks ÁFI H Karan Mitra; Christer Ahlund; Arkady Zaslavsky

Template Based Composition for Requirements Based Network Stack AMFI Ì
Abbas Siddiqui; Rahamatullah Khondoker; Paul Mueller

A Distributed and Conflict-Aware Measurement Method Based on Local Information Exchange in Overlay Networks Hoang "%) (
Dinh; Go Hasegawa; Murata Masayuki

Coffee/Tea Break 3:30 – 4 pm

Towards an Enhanced Revenue Model for Virtual Networks Embedding Problem ÆFÎ € Aun Haider; Harsha R Sirisena

An Adaptive Sender-Based VoIP Loss-Recovery Technique Á Sami S Alwakeel; Adel AlBahouth

#### **Optical Networks and Air Interfaces**

Friday 9<sup>th</sup> NOV 9-12 noon

A Rate-Adaptive Segmentation Algorithm for Integrated Hybrid Optical Networks ∰Fi € Raimena Veisllari; Steinar Bjornstad; Norvald Stol

How Good (Or Bad) is Shortest Path Routing in Layered Networks "398 Ronald G. Addie; David Fatseas; Yu Peng; Fan Li; Moshe Zukerman

Linear Adaptive Channel Equalization for Multiuser MIMO-OFDM Systems AMF G Lakmali Atapattu; Gayan Munasinghe; Karla Ziri-Castro; Hajime Suzuki; Anagiyaddage D. S. Jayalath

Coffee Brake 10-10.30 am

Applying Akaroa2 for Automated Simulation Length Control & On-Line Statistical Error Analysis of Results in OPNET ARE I Mofassir Haque; Krzysztof Pawlikowski; Don McNickle; Andreas Willig

Sensor Network Controlled Indoor Cognitive Radio Systems ##FJG Meng-Jung Ho; Stevan Mirko Berber; Kevin W Sowerby

Access Network Energy Efficient Dynamic Power Scaling ###FJÌ Rakesh Pradhan, Mark Gregory

#### **Optical Networks and Air Interfaces**

Friday 9<sup>th</sup> NOV 12-2 pm

An Efficient Mapping Scheme for Locator / ID Separation Protocol Æ∰ŒH Muhammad Tanzeel Murtaza Khan; Adeel Baig

Tracking Highly Available Peers in KAD ƀJ **He Yan; Fangfang Liao; Lei Wang; Wenqing Cheng** 

Control Flow Management in The Hospitality Industry AMGFÍ Alicia Revello; Abdel Obaid; Anne Amja