

Program

Monday, December 6

9:00 AM - 10:30 AM

HeterWMN-MN-S1: HeterWMN Mobile Networks: Session 1

Room: Hibiscus B

Chair: Andrej Stefanov (Northeastern University, USA)

Method for Efficiently Constructing and Updating Radio Map of Fingerprint Positioning

Xingchuan Liu (Tsinghua, P.R. China); Sheng Zhang (Tsinghua university, P.R. China); Henghui Lu (Tsinghua University, P.R. China); Xiaokang Lin (Tsinghua University, P.R. China)

Average Sum-Rate of Distributed Alamouti Space-Time Scheme in Two-Way Amplify-and-Forward Relay Networks

Trung Q. Duong (Blekinge Institute of Technology, Sweden); Chau Yuen (Singapore University of Technology and Design, Singapore); Hans-Jurgen Zepernick (Blekinge Institute of Technology, Sweden); Xianfu Lei (Southwest Jiaotong University, P.R. China)

MIMO Two-Way Relay Channel with Superposition Coding and Imperfect Channel Estimation

Ioannis Krikidis (University of Cyprus, Cyprus); John Thompson (University of Edinburgh, United Kingdom)

HeterWMN-WN-S1: HeterWMN Wireless Networks: Session 1

Room: Hibiscus A

Chair: Huaping Liu (Oregon State University, USA)

Test Bed Implementation of N-Layered Mobile IPv6 Based Network Architecture in Search of Optimal Performance

Nitul Dutta (Sikkim Manipal Institute of Technology, India)

A Mini-Slot-based Cooperative MAC Protocol for Wireless Mesh Networks

Hongzhi Jiao (University of Agder, Norway); Frank Y. Li (University of Agder, Norway)

Secure Physical-layer Key Generation Protocol and Key Encoding in Wireless Communications

Apirath Limmanee (Jacobs University, Germany); Werner Henkel (Jacobs University Bremen, Germany)

HeterWMN-WSN-S1: HeterWMN Wireless Sensor Networks: Session 1

Room: Gardenia

Chair: Jaafar Elmighani (University of Leeds, United Kingdom)

A Novel Scalable Routing Scheme Based on Polychromatic Sets Theory for Wireless Sensor Networks

Shancang Li (Swansea University, United Kingdom)

A Selection Region Based Routing Protocol for Random Mobile ad hoc Networks

Di Li (Beijing University of Posts and Telecommunication, P.R. China); Changchuan Yin (Beijing University of Posts and Telecommunications, P.R. China); Changhai Chen (Beijing University of Posts and telecommunications, P.R. China); Shuguang Cui (Texas A&M University, USA)

A Mobility-Aware Medium Access Control Protocol for Wireless Sensor Networks

Waltenegus Dargie (Technische Universität Dresden, Germany)

11:00 AM - 12:30 PM

HeterWMN-MN-S2: HeterWMN Mobile Networks: Session 2

Room: Hibiscus B

Chair: Annamalai Annamalai (Prairie View A&M University, USA)

Cooperative diversity with OSTBC transmission and adaptive-gain amplify-and-forward MIMO relaying

Lei Cao (Beijing University of Posts and Telecommunications, P.R. China); Li Chen (Beijing University of Posts and Telecommunications, P.R. China); Xin Zhang (Beijing University of Posts and

Telecommunications, P.R. China); Dacheng Yang (Beijing University of Posts and Telecommunications, P.R. China)

Interference Alignment Through User Cooperation for Two-cell MIMO Interfering Broadcast Channels

Wonjae Shin (Samsung Advanced Institute of Technology (SAIT), Korea); Namyoon Lee (Samsung Advanced Institute of Technology, Korea); Jong Bu Lim (Samsung Electronics Co., Ltd., Korea); Changyong Shin (Samsung Advanced Institute of Technology, Korea); Kyunghun Jang (Samsung Advanced Institute of Technology, Korea)

Design and Analysis of Compress-and-Forward Cooperation in a Virtual-MIMO Detection System

Jing Jiang (University of Edinburgh, United Kingdom); John Thompson (University of Edinburgh, United Kingdom); Peter Grant (Edinburgh School of Engineering and Electronics, United Kingdom)

HeterWMN-WN-S2: HeterWMN Wireless Networks: Session 2

Room: Hibiscus A

Chair: Huaping Liu (Oregon State University, USA)

Range-based Localization in Wireless Networks using Decision Trees

T. Aaron Gulliver (University of Victoria, Canada); Khalid Almuzaini (University of Victoria, Canada)

Service Discovery for Delay Tolerant Networks

Zijian Wang (Rensselaer Polytechnic Institute, USA); Eyuphan Bulut (Rensselaer Polytechnic Institute, USA); Boleslaw K Szymanski (Rensselaer Polytechnic Institute, USA)

Managing QoS in Mixed Wireless Networks using the Power Performance Measure

Yacob Astatke (Morgan State University, USA); Dean Richard (Morgan State University, USA)

HeterWMN-WSN-S2: HeterWMN Wireless Sensor Networks: Session 2

Room: Gardenia

Chair: Jaafar Elmighani (University of Leeds, United Kingdom)

Mobility in a Description based Clustered Ad Hoc Network

Tharinda Nishantha Vidanagama (Waseda University, Japan); Hidenori Nakazato (Waseda University, Japan)

Building a Trust-Aware Dynamic Routing Solution for Wireless Sensor Networks

Guang Jin (Intelligent Automation Inc, USA); Hongmei Deng (Intelligent Automation Inc., USA); Roger Xu (Intelligent Automation Inc., USA); Weisong Shi (Wayne State University, USA)

Analysis on Capacity and Delay for Redundant Multiple Source Routing in Mobile Ad Hoc Networks

Zhuxiu Yuan (Dalian University of Technology, P.R. China); Lei Wang (Dalian University of Technology, P.R. China); Cheng Meng (Dalian University of Technology, P.R. China); Chunlei Liu (Dalian University of Technology, P.R. China); Trung Q. Duong (Blekinge Institute of Technology, Sweden); Lei Shu (Osaka University, Japan)

Wireless Sensor Network Interconnection Protocol

Kurt Smolderen (University of Antwerp, Belgium); Peter De Cleyn (University of Antwerp, Belgium); Chris Blondia (University of Antwerp, Belgium)

2:00 PM - 3:30 PM

HeterWMN-MN-S3: HeterWMN Mobile Networks: Session 3

Room: Hibiscus B

Chair: John Thompson (University of Edinburgh, United Kingdom)

Joint control of bandwidth and playout-delay for streaming traffic over faded links

Tatiana Patriarca (University of Rome, Sapienza, Italy); Enzo Baccarelli (University of Rome "La Sapienza", Italy); Nicola Cordeschi ("Sapienza" University of Rome, Italy)

Unified Analysis of Ergodic Capacity of Cooperative Non-Regenerative Relaying with Adaptive Source Transmission Policies

Annamalai Annamalai (Prairie View A&M University, USA)

On the Connection Availability between Relay Nodes in a VANET

André Cardote (Carnegie Mellon University / University of Aveiro, Portugal); Susana Isabel Barreto de Miranda Sargento (Instituto de Telecomunicações, Universidade de Aveiro, Portugal); Peter Steenkiste (Carnegie Mellon University, USA)

Communication Theoretic Analysis of Underwater Ad-Hoc Networks in the Presence of Interference

Andrej Stefanov (Northeastern University, USA); Milica Stojanovic (Northeastern University, USA)

HeterWMN-WN-S3: HeterWMN Wireless Networks: Session 3

Room: Hibiscus A

Chair: Yacob Astatke (Morgan State University, USA)

Performance Analysis of Cooperative Handover in Heterogeneous Wireless Networks

Zhiwei Gao (Tongji University, P.R. China); Yusheng Ji (National Institute of Informatics, Japan)

Multi-Channel Anypath Routing in Wireless Mesh Networks

Andreas Lavén (Karlstad University, Sweden); Andreas J. Kassler (Karlstad University, Sweden)

Group-based Secure Source Authentication Protocol for VANETs

You Lu (Beijing University of Posts and Telecommunications, P.R. China); Biao Zhou (UCLA, USA);

Fei Jia (University of California, Los Angeles, USA); Mario Gerla (University of California at Los Angeles, USA)

HeterWMN-WSN-S3: HeterWMN Wireless Sensor Networks: Session 3

Room: Gardenia

Chair: Walteneus Dargie (Technische Universität Dresden, Germany)

A Clustering/Multi-hop Hybrid Routing Method for Wireless Sensor Networks with Heterogeneous Node Types

Sampath Priyankara (University of Osaka, Japan); Kazuhiko Kinoshita (Osaka University, Japan);

Hideki Tode (Osaka Prefecture University, Japan); Koso Murakami (Osaka University, Japan)

Effects of Sampling Rate on Collision Probability in Hybrid MAC Protocols in WSN

Walteneus Dargie (Technische Universität Dresden, Germany); Qian Dong (Technical University of

Dresden, Germany); Alexander Schill (Technische Universität Dresden, Germany)

Storage-aided Reliable Sensing for Dynamic Heterogeneous Sensor Networks; a Graph-Theoretic Analysis

Amar H Kabashi (University of Leeds, United Kingdom); Jaafar Elmirghani (University of Leeds, United Kingdom)

A Refinement Scheme for Location Estimation Process in Indoor Wireless Sensor Networks

Oleksandr Artemenko (University of applied sciences Erfurt, Germany); Gunar Schorcht (Erfurt

University of Applied Sciences, Germany); Mikhail Tarasov (Ilmenau University of Technology, Germany)

4:00 PM - 5:30 PM

HeterWMN-Panel: HeterWMN Panel Discussion

Room: Gardenia

Chairs: Walteneus Dargie (Technische Universität Dresden, Germany), Jaafar Elmirghani (University of Leeds, United Kingdom), John Thompson (University of Edinburgh, United Kingdom)