

ICNC 2012 Technical Program

Maui, Hawaii, USA
January 30-February 2, 2012
<http://www.conf-icnc.org>



Monday, January 30

09:00 - 10:20

WSI: Mobility and Communication for Cooperation and Coordination (I)

Room: Maui Suite 1

Chairs: Tahiry Razafindralambo (INRIA Lille - Nord Europe, France), Enrico Natalizio (INRIA Lille - Nord Europe, France)

On the Impact of the Propagation Environment on Controlled Mobility Algorithms

Rosario Surace (University of Calabria, Italy); Valeria LoscrÃ (University of Calabria, Italy); Enrico Natalizio (INRIA Lille - Nord Europe, France)

Optimal Placement of Multiple Visual Sensors using Simulation of Pedestrian Movement

Yunyoung Nam (Stony Brook University, USA)

An Effective Back-up Support System of P-VCASS by Laser Scanners in Intersections

Masaki Isa (Kansai University, Japan)

Effective Algorithms for Substitution Vehicular Collision Avoidance Support System (S-VCASS)

Yuki Tani (Kansai University, Japan)

WSIV: Wireless Body Area Networks for mHealth

Room: Maui Suite 4

Chairs: Tirthankar Ghosh (St. Cloud State University, USA), Jens M. Pedersen (Aalborg University, Denmark)

Reliable Body Area Networks Using Relays: Restricted Tree Topology

Hind Munzer Chebbo (Fujitsu Laboratories of Europe, United Kingdom); Saied Abedi (Fujitsu Laboratories of Europe, United Kingdom); Tharaka Anuradha Lamahewa (DSTO, Australia); David B

- Smith (National ICT Australia, Australia); Dino Miniutti (National ICT Australia, Australia); Leif W Hanlen (National ICT Australia & Australian [National University](#), Australia)
- An Analysis of Requirements to Supporting Mobility in Body Area Networks
Bart Braem (University of Antwerp, Belgium); Chris Blondia (University of Antwerp, Belgium)
- An Autonomic Plane for Wireless Body Sensor Networks
Giancarlo Fortino (Università della Calabria, Italy); Stefano Galzarano (University of Calabria, Italy); Antonio Liotta (Eindhoven University of Technology, The Netherlands)
- Advances and Challenges of Wireless Body Area Networks for [Healthcare](#) Applications
Craig Chin (Southern Polytechnic University, USA); Garth V Crosby (Southern Illinois University Carbondale, USA); Tirthankar Ghosh (St. Cloud State University, USA); Renita Murimi (Oklahoma Baptist University, USA)

WSVI: Communication Technologies for the Smart Grid

- Room: Maui Suite 5
Chairs: Ana Rossell³-Busquet (Technical University of Denmark, Denmark), Wushao Wen (Sun Yat-Sen University, P.R. China)
- Survivable Smart Grid Communication: Smart-Meters Meshes to the Rescue
Arjun P Athreya ([Carnegie Mellon University](#), USA); Patrick Tague (Carnegie Mellon University, USA)
- A Wireless Mesh Communication Protocol for Smart-metering
Daniel Geelen (Eindhoven University of Technology, The Netherlands); Gert van Kempen (SmartDutch, The Netherlands); Frans van Hoogstraten (SmartDutch, The Netherlands); Antonio Liotta (Eindhoven University of Technology, The Netherlands)
- G.hnem for AMI and DR
Ana Rossell³-Busquet (Technical University of Denmark, Denmark)
- Sub 1GHz Wireless LAN Propagation Path Loss Models for Urban Smart Grid Applications
Stefan Aust (NEC Communication Systems, Ltd., Japan); Tetsuya Ito (NEC Communication Systems, Ltd., Japan)

10:00 - 12:00

Lecture I: Next Generation Internet: Architectures for Future Internet Evolution

Speaker: Prof. Raj Jain, Washington University in St. Louis, USA

Room: Regency A

Chair: Khaled El-Maleh (Qualcomm Inc., USA)

10:40 - 12:00

WSII: WSII: Mobility and Communication for Cooperation and Coordination (II)

Room: Maui Suite 1

Chair: Enrico Natalizio (INRIA Lille - Nord Europe, France)

Multiple Point of Interest Discovery and Coverage with Mobile Wireless Sensors

Milan Erdelj (INRIA Lille - Nord Europe, France); Enrico Natalizio (INRIA Lille - Nord Europe, France); Tahiry Razafindralambo (INRIA Lille - Nord Europe, France)

Handover in VLC Systems with Cooperating Mobile Devices

Anna Maria Vegni (University of ROMA TRE, Italy); Thomas Little (Boston University, USA)

Percontrol: A Pervasive System for Educational Environments

Valderi Leithardt (Universidade Federal do Rio Grande do Sul, Brazil); David Nunes (University of Coimbra, Portugal); Anubis Rosseto (Federal Institute Sul-rio-grandense, Brazil); Carlos O Rolim (Federal University of Rio Grande do Sul, Brazil); Mario A R Dantas (UFSC, Brazil); Jorge SÃ; Silva (University of Coimbra, Portugal); Claudio Geyer (Universidade Federal do Rio Grande do Sul, Brazil)

A mobility-assisted protocol for supervised learning of link quality estimates in wireless networks

Eduardo Feo Flushing (Istituto Dalle Molle Sullâ€™Intelligenza Artificiale, Switzerland); Jawad Nagi (Dalle Molle Institute for Artificial Intelligence (IDSIA), Switzerland); Gianni A. Di Caro (Dalle Molle Institute for Artificial Intelligence (IDSIA), Switzerland)

WSV: Pervasive Communication Security, Social Networking and Social Engineering

Room: Maui Suite 4

Chairs: Narasimha Shashidhar (Sam Houston State University, USA), Octavio Herrera (University of Pittsburgh, USA)

Fine-grained Analysis and Design of ASIP Instruction Set for Application of Encryption

Jinbin Ju (Harbin Institute of Technology, P.R. China)

A Bare PC TLS Webmail Server

Patrick Appiah-Kubi (Towson University, USA); Ramesh Karne (Towson University, USA); Alexander L Wijesinha (Towson University, USA)
An Elliptic Curve On-line\Off-line Digital Signature Scheme for MANETs
Hisham Dahshan (Egypt, Egypt)
Detecting SIP flooding Attacks on IP Multimedia Subsystem (IMS)
Zhiqiang Chen (Sun Yat-sen University & School of Software, P.R. China); Wushao Wen (Sun Yat-Sen University, P.R. China); Da Yu (Peking University, P.R. China)

13:30 - 15:30

CNC II: Ad-hoc Sensor Networks

Room: Maui Suite 4

Chair: Hind Munzer Chebbo (Fujitsu Laboratories of Europe, United Kingdom)
A Reliable and Energy-Efficient MAC Protocol for Cluster-Tree Wireless Sensor Networks

Shunsuke Takagawa (University of Doshisha, Japan); Mehdad N. Shirazi (NICT, Japan); Bing Zhang (National Institute of Information and Communications Technology, Japan); Jun Cheng (Doshisha University, Japan); Ryu Miura (NICT, Japan)

An Empirical Link-Quality Analysis for Wireless Sensor Networks
Abdellah Chehri (University of Ottawa, Canada)

Routing Wireless Real-Time Traffic Using Minimum Spanning Trees
Danilo Tardioli (University of Zaragoza, Spain); Jos  Luis Villarreal (University of Zaragoza, Spain)

Enhancing TCP Performance in Wireless Mesh Networks by Cross Layer Design

Nasim Arianpoo (University of British Columbia, Canada); Paria Jokar (University of British Columbia, Canada); Victor CM Leung (The University of British Columbia, Canada)

Distributed Allocation of the Sensing Times for Cooperative Spectrum Sensing
Olivier van den Biggelaar (Universit  libre de Bruxelles, Belgium); Jean-Michel Dricot (Universit  Libre de Bruxelles, Belgium); Philippe De Doncker (ULB, Belgium); Fran ois Horlin (Universit  Libre de Bruxelles, Belgium)

Making Sense of Sensor Data in Practical Wireless Sensor Network Designs
Lamling Venus Shum (University College London, United Kingdom); Stephen Hailes (University College London, United Kingdom); Graeme McPhillips (University College London, United Kingdom); Lawrence Cheng (University College London, United Kingdom)

CNC IV: Signal Processing and Security in Communications

Room: Maui Suite 5

Chair: Patrick Appiah-Kubi (Towson University, USA)

ASIC Design of a Gbit/s LDPC Decoder for Iterative MIMO Systems

Christina Gimpler (University of Kaiserslautern, Germany); Frank Kienle (University of Kaiserslautern, Germany); Christian Weis (University of Kaiserslautern, Germany); Norbert Wehn (University of Kaiserslautern, Germany); Matthias Alles (University of Kaiserslautern, Germany)

Novel MIMO Channel Estimation At Transmitter for LTE Release 10 Systems

Enoch Lu (Polytechnic Institute of New York University, USA); Yingxue Li (InterDigital Comm LLC, USA); I-Tai Lu (Polytechnic Institute of NYU, USA)

Real-Time Adaptive Streaming Mechanism with Device Capability for Resource Efficiency

Yoon-Sik Yoo (ETRI, Korea); Il-Woo Lee (ETRI, Korea); Young-Sik Chung (ETRI, Korea)

FPGA Implementation of Extended Reconfigurable Binary Edwards Curve based Processor

Ayantika Chatterjee (Indian Institute of Technology, Kharagpur, India); Indranil Sen Gupta (Indian Institute of Technology, Kharagpur, India)

Asynchronous Control of Distributed Energy Resources using Behaviour Descriptions

Daniel Kullmann (RisÅ, DTU, Denmark); Oliver Gehrke (RisÅ, DTU Nat. Lab. for Sustainable Energy, Denmark); Henrik Bindner (RisÅ, DTU, Denmark)

Training Sequence Design for Robust Joint Detection and Channel Estimation Over Rank-Deficient MIMO Links

Jose Luis Lagunas Morales (Université Laval, Canada); Sebastien Roy (Laval University, Canada)

Lecture II: Raptor Codes: Algorithms and Applications

Speaker: Dr. Mike Luby, Vice President of Technology, Qualcomm, USA

Room: Regency A

Chair: Khaled El-Maleh (Qualcomm Inc., USA)

WSIII: Cost, Reliability, Energy Requirements and Constraints in Next Generation Networks

Room: Maui Suite 1

Chair: Gert van Kempen (SmartDutch, The Netherlands)

Green-Aware Routing in GMPLS Networks

Jiayuan Wang (Technical University of Denmark, Denmark); Sarah Ruepp (Technical University of Denmark, Denmark); Anna V Manolova (Danish Technical University, Denmark); Lars Dittmann (Technical University of Denmark, Denmark); Sergio Ricciardi (Universitat Politècnica de Catalunya, Spain); Davide Careglio (Universitat Politecnica de Catalunya, Spain)

Sharing Costs in Social Community Networks

Ranjan Pal (University of Southern California, USA); Satya Ardhy Wardana (IEEE Member - Denmark Region, Denmark); M. Tahir Riaz (Aalborg University, Denmark); Divya Elango (University of Southern California, USA)

A method for classification of network traffic based on C5.0 Machine Learning Algorithm

Tomasz Bujlow (Aalborg University, Denmark); Tahir Riaz (Aalborg University, Denmark); Jens M. Pedersen (Aalborg University, Denmark)

Cost and Availability Analysis of 2- and 3-Connected WDM Networks

Physical Interconnection

Jose M Gutierrez (Aalborg University, Denmark); M. Tahir Riaz (Aalborg University, Denmark); Jens M. Pedersen (Aalborg University, Denmark)

Design and Implementation of High Event Density Area Centered Clustering based Routing

Boungju Jeon (Chung-Ang University, Korea); Byeongkwan Kang (Chung-Ang University, Korea); Sehyun Park (Chung-Ang University, Korea)

Reliability and Performance of IEEE 802.11n for Vehicle Networks with Multiple Nodes

Seungbae Lee (Auburn University, USA); Alvin Lim (Auburn University, USA)

16:00 - 18:00

CNC I: Wireless Communications and Cognitive Radio

Room: Maui Suite 1

Chair: Bart Braem (University of Antwerp, Belgium)

A Novel Reliable Broadcasting Scheme under Cognitive Radio Environment Based on Erasure Correctable Codes

- Arash Asareh (The University of Electro-Communication, Japan); Takeo Fujii (The University of Electro-Communications, Japan)
- A Time-Variant Statistical Model for the Polarization of Received Electromagnetic Waves in Indoor Communication Channels
- Ali Panahandeh (Université Libre de Bruxelles (ULB), Belgium); François Quitin (Université Libre de Bruxelles (ULB), Belgium); Jean-Michel Dricot (Université Libre de Bruxelles, Belgium); François Horlin (Université Libre de Bruxelles, Belgium); Claude Oestges (Université Catholique de Louvain, Belgium); Philippe De Doncker (ULB, Belgium)
- Efficient MMSE Design for Joint MIMO Processing in Analog Network Coding Schemes
- Enoch Lu (Polytechnic Institute of New York University, USA); Yiran Xu (Utah State University, USA); I-Tai Lu (Polytechnic Institute of NYU, USA)
- Reinforcement Learning for Energy Efficient Wireless Transmission: Green Communications for A Green Hand Transmitter
- Kun Zheng (University of Tennessee, Knoxville, USA); Husheng Li (University of Tennessee, USA)
- Cooperative Primary-Secondary Transmission Using Superposition Coding and Successive Interference Cancellation
- Taewon Kim (Hanyang University, Korea); Dongwoo Kim (Hanyang University, Korea)

CNC III: Optical Networks & Network Platforms

Room: Maui Suite 4

Chair: Jose M Gutierrez (Aalborg University, Denmark)

Dimensioning an Scheduler Buffer in OBS Networks Using Forward Resource Reservation

Hiroyuki Ichikawa (Chiba Institute of Technology, Japan); Koji Kamakura (Chiba Institute of Technology, Japan)

Extending ONU Lifetime beyond 72 Hours in EPON for Emergency Communications

Jingjing Zhang (NEC Labs America, USA); Nirwan Ansari (NJIT, USA)

Regenerator Allocation for Scheduled Lightpath Demands in Translucent Optical Networks

Ying Chen (University of Windsor, Canada); Arunita Jaekel (University of Windsor, Canada)

Selection and Placement of Switching Equipment in a Broadband Access Network

Brigitte Jaumard (Concordia University, Canada); Rejaul Chowdhury (Concordia University, Canada)
Deployment of High Altitude Platforms Network: A Game Theoretic Approach
Ru Zong (Xidian University, P.R. China); Xinbo Gao (Xidian University, P.R. China); Xuyu Wang (Xidian University, P.R. China); Lv Zongting (Xidian University, P.R. China)
Resource Allocation and Scheduling in Cloud Computing
Eman Elghoneimy (Texas A&M University at Qatar, Qatar); Othmane Bouhali (Texas A&M University at Qatar, Qatar); Hussein Alnuweiri (Texas A&M University, Qatar)

CNC V: Networking and System Performance

Room: Maui Suite 5

Chair: Zehan Wang (Imperial College London, United Kingdom)

Experimental Evaluation of the Effect of Queue Management Schemes on the Performance of High Speed TCPs in 10Gbps Network Environment

Lin Xue (Louisiana State University, USA); Cheng Cui (Louisiana State University, USA); Suman Kumar (Troy University, USA); Seung-Jong Park (Louisiana State University, USA)

On the Detection of LRD Phenomena

Houssain Kettani (Polytechnic University of Puerto Rico, USA)

Performance of Redundancy Methods in P2P Networks Under Churn

Octavio Herrera (University of Pittsburgh, USA); Taieb Znati (University of Pittsburgh, USA)

An Efficient Inter-Domain Handover Scheme with Minimized Latency for PMIPv6

Inwhee Joe (Hanyang University, Korea)

Connectivity Abstractions and "Service-Oriented Network" Architecture

Doan B Hoang (University of Technology, Sydney, Australia); Pham CongDuc (University of Pau, France)

Lecture III: Wireless Cloud Computing to Enable Rich Mobile Multimedia Applications

Speaker: Prof. Sujit Dey, University of California, San Diego, USA

Room: Regency A

Chair: Khaled El-Maleh (Qualcomm Inc., USA)

Tuesday, January 31

08:20 - 09:30

Keynote I: Vehicular Communications: Challenges and Opportunities

Speaker: Weihua Zhuang, Professor and Tier I Canada Research Chair in Wireless Communication Networks, University of Waterloo, Canada

Room: Regency A

Chair: Kia Makki (Technological University of America (TUA), USA)

10:00 - 12:00

DSTA I: Coding for Storage

Room: Maui Suite 4

Chair: Eitan Yaakobi (University of California, San Diego, USA)

Coding for the Binary Asymmetric Channel

Ryan Gabrys (UCLA, USA); Lara Dolecek (UCLA, USA)

A Chase-type Koetter-Vardy Algorithm for Soft-decision Reed-Solomon Decoding

Xinmiao Zhang (Case Western Reserve University, USA); Yu Zheng (Case Western Reserve University, USA); Yingquan Wu (Link-A-Media Devices Corp., USA)

Exploiting the Shift Property of Structured LDPC Codes for Reduced-Complexity Sliced Message Passing based Decoder Design

Xiaoheng Chen (Microsoft, USA); Chung-Li Wang (LSI Corporation, USA)

A New Min-Sum Based Decoding Algorithm for Non-Binary LDPC Codes

Chung-Li Wang (LSI Corporation, USA); Zongwang Li (LSI logic, USA); Shaohua Yang (LSI Corporation, USA)

Additive encoding low-density parity-check (AE-LDPC) codes for two-dimensional magnetic recording (TDMR)

Euseok Hwang (LSI Corporation, USA); Rohit Negi (Carnegie Mellon University, USA); B. V. K. Vijaya Kumar (Carnegie Mellon University, USA)

IT I: Invited Talks I

Room: Regency A

Chair: Chad M Spooner (NorthWest Research Associates, USA)

Security Issues in Network Virtualization for the Future Internet

Sriram Natarajan (University of Massachusetts, Amherst, USA); Tilman Wolf (University of Massachusetts, USA)

Trust 2.0: Who to Believe in the Flood of Online Data?

Mozhgan Tavakolifard (Norwegian University of Science and Technology, Norway); Kevin C Almeroth (University of California, Santa Barbara, USA)
Surviving in Cyberspace
Kevin Kwiat (Air Force Research Lab, USA)
Wireless Security and Monitoring System Using Array Antenna: Array Sensor
Tomoaki Ohtsuki (Keio University, Japan)

OGN: Optical & Grid Networking

Room: Maui Suite 5

Chair: Halima Elbiaze (University of Quebec at Montreal, Canada)

Isolation and Resource Efficiency of Virtual Optical Networks

Marc De Leenheer (Ghent University & University of California - Davis, USA); Jens Buysse (Ghent University & INTEC, Belgium); Chris Develder (Ghent University - IBBT, Belgium); Biswanath Mukherjee (- University of California Davis, USA)

Experimental Analysis of 10Gbps Transfers Over Physical and Emulated Dedicated Connections

Bradley W. Settlemyer (Oak Ridge National Laboratory, USA); Nageswara Rao (Oak Ridge National Laboratory, USA); Stephen W. Poole (Oak Ridge National Laboratory, USA); Stephen Hodson (Oak Ridge National Laboratory, USA); Susan Hicks (Oak Ridge National Laboratory, USA); Paul Newman (Oak Ridge National Laboratory, USA)

Asymptotic Analyses for Coherent and Subcarrier Modulated Wireless Optical Communications

Mingbo Niu (University of British Columbia & Faculty of Applied Science, Canada); Julian Cheng (University of British Columbia, Canada); Jonathan F Holzman (University of British Columbia (UBC) Okanagan, Canada)

Dynamic Multicasting in Optical Split-Incapable WDM Networks for Supporting High-Bandwidth Applications

Jeremy Plante (University of Massachusetts Dartmouth, USA); Arush G Gadkar (University of Massachusetts, Dartmouth, USA); Vinod M. Vokkarane (Massachusetts Institute of Technology (MIT) / University of Massachusetts Dartmouth, USA)

Dynamic Non-Continuous Single Slot Advance Reservation over Wavelength Routed Networks

Bharath Honnenahalli Ramaprasad (University of Massachusetts Dartmouth, USA); Arun Somani (Iowa State University, USA); Vinod

M. Vokkarane (Massachusetts Institute of Technology (MIT) /
University of Massachusetts Dartmouth, USA)
Service Differentiation in OFS Network: Performance Analysis
Halima Elbiaze (University of Quebec at Montreal, Canada); Iyas
Khayata (University of Quebec in Montreal, Canada)

WC I: Wireless Network Design

Room: Maui Suite 1

Chair: Saeed S. Ghassemzadeh (AT&T Labs - Research, USA)

A Greedy Spectrum Sharing Algorithm For Cognitive Radio Networks

Elmahdi Driouch (Universite du Quebec Ã Montreal, Canada); Wessam
Ajib (UniversitÃ© du QuÃ©bec Ã MontrÃ©al, Canada); Ahmed Ben
Dhaou (University of Quebec at Montreal, Canada)

Hybrid Cooperative MAC Protocol for Wireless Ad Hoc Networks

Yufeng Wang (University of South Florida, USA)

Topology Control in Multihop Wireless Networks with Multi-beam Smart
Antennas

Brendan Mumeey (Montana State University, USA); Ivan Judson
(WebFilings, LLC, USA); Jian Tang (Syracuse University, USA); Yun
Xing (Syracuse University, USA)

Opportunistic Primary-Secondary Spectrum Sharing with a Rotating Radar

Rathapon Saruthirathanaworakun (Carnegie Mellon University &
Instituto Superior TÃ©cnico, UTL, Portugal); Jon Peha (White House
Office of Science and Technology Policy & Carnegie Mellon University,
USA); Luis M. Correia (IST - Technical University Lisbon, Portugal)

Using Multiple Channels to Improve SDR Flexibility and Performance

Roberto de Matos (Federal University of Santa Catarina, Brazil);
AntÃ³nio Augusto FrÃ¶hlich (Federal University of Santa Catarina,
Brazil); Leandro Buss Becker (Federal University of Santa Catarina,
Brazil)

Threshold Improvement of Low-Density Lattice Codes via Spatial Coupling

Hironori Uchikawa (Tokyo Institute of Technology, Japan); Brian
Michael Kurkoski (University of Electro-Communications, Japan);
Kenta Kasai (Tokyo Institute of Technology, Japan); Kohichi Sakaniwa
(Tokyo Institute of Technology, Japan)

13:30 - 15:30

CLD: Cloud Computing and Networking

Room: Maui Suite 4

Chairs: Volker Fusenig (Fraunhofer Research Institution AISEC, Germany),
Md Ashfakul Islam (University of Alabama, USA)

Infrastructure as a Service (IaaS) for NASA's Mission Directorate

Keith Shackelford (NASA, USA); James Williams (NASA, USA)

Cloud Computing Infrastructure Robustness: A Game Theory Approach

Nageswara Rao (Oak Ridge National Laboratory, USA); Chris Yu Tak

Ma (Advanced Digital Sciences Center, Illinois at Singapore,

Singapore); Fei He (State University of New York at Buffalo, USA); Jun

Zhuang (State University of New York at Buffalo, USA); David K. Y.

Yau (Purdue University, USA)

Performance Analysis of a Tree-Based Consistency Approach for Cloud
Databases

Md Ashfakul Islam (University of Alabama, USA); Susan Vrbsky (The
University of Alabama, USA); Mohammad Asadul Hoque (The
University of Alabama, USA)

Security Architecture for Cloud Networking

Volker Fusenig (Fraunhofer Research Institution AISEC, Germany);

Ayush Sharma (Fraunhofer Research Institution AISEC, Germany)

QoS and Security Aware Allocation of Directed Acyclic Graph on
Heterogeneous Distributed Real-Time Systems

Naeem Al-Oudat (Iowa State University, USA); Manimaran

Govindarasu (Iowa State University, USA)

Towards Bringing Real-Time Online Applications on Clouds

Sergey Gorlatch (University of Munster, Germany); Dominik

Meilaender (Uni Muenster, Germany); Alexander Ploss (University of

Muenster, Germany); Frank Glinka (University of Muenster, Germany)

COG I: Cognitive Computing

Room: Maui Suite 1

Chair: Xinbo Gao (Xidian University, P.R. China)

Robust Video Fingerprinting Using Local Spatio-Temporal Features

Cheng Deng (Xidian University, P.R. China); Yifan Zhang (Xidian

University, P.R. China); Xinbo Gao (Xidian University, P.R. China)

Sketching the Interference Wall: A Linear Programming Approach

Joseph Lee (CENS, USA)

Multi-objective Reinforcement Learning based Routing in Cognitive Radio
Networks: Walking in a Random Maze

Kun Zheng (University of Tennessee, Knoxville, USA); Husheng Li

(University of Tennessee, USA); Robert Caiming Qiu (Tennessee Tech

University, USA); Shuping Gong (University of Tennessee, Knoxville,

USA)

A Novel Stochastic Discretized Weak Estimator operating in Non-Stationary Environments

Anis Yazidi (University of Agder, Norway); John B. Oommen (Carleton University, Canada); Ole-Christoffer Granmo (University of Agder, Norway)

A Biological Inspired Features Based Saliency Map

Bing Han (VIPS Lab, School of Electronic Engineering, Xidian University, P.R. China); Xinbo Gao (Xidian University, P.R. China); Xuelong Li (Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, P.R. China); Dacheng Tao (University of Technology, Sydney, Singapore)

ISA: Internet Services and Applications

Room: Maui Suite 5

Chair: Manimaran Govindarasu (Iowa State University, USA)

How to Prevent Identity Fraud in Locator/Identifier-Split Architectures

Oliver Hanka (Technische Universität München, Germany)

Efficient Conflict Detection in Flow-Based Virtualized Networks

Sriram Natarajan (University of Massachusetts, Amherst, USA); Xin Huang (Deutsche Telekom R&D Lab USA, USA); Tilman Wolf (University of Massachusetts, USA)

A Resource Management Approach to Web Browser Security

Jun Li (University of Oregon, USA); Dongting Yu (University of Oregon, USA); Luke Maurer (University of Oregon, USA)

Video Quality Degradation on IPTV Networks

Jewel Okyere-Benya (Eindhoven University of Technology, The Netherlands); Mamoon Aldiabat (Eindhoven University of Technology, The Netherlands); Vlado Menkovski (Eindhoven University of Technology, The Netherlands); George Exarchakos (Eindhoven University of Technology, The Netherlands); Antonio Liotta (Eindhoven University of Technology, The Netherlands)

SLAPv: A Service Level Agreement Enforcer for Virtual Networks

Hugo Carvalho (Federal University of Rio de Janeiro & GTA - Grupo de Teleinformática e Automação - Coppe/PEE/UFRJ, Brazil); Natalia Castro Fernandes (Universidade Federal do Rio de Janeiro, Brazil); Otto Carlos M. B. Duarte (Universidade Federal do Rio de Janeiro, Brazil); Guy Pujolle (University Pierre et Marie Curie - Paris 6, France)

On Zap Time Minimization in IPTV Networks

Matthew Long (University of Oklahoma, USA); Sridhar Radhakrishnan (University of Oklahoma, USA); Suleyman Karabuk (University of Oklahoma, USA); John Antonio (University of Oklahoma, USA)

IT II: Invited Talks II

Room: Regency A

Chair: Dilip Krishnaswamy (Qualcomm, USA)

Towards A Large-Scale Cognitive Radio Network: Testbed, Intensive Computing, Frequency Agility and Security

Zhe Chen (Tennessee Technological University, USA); Changchun Zhang (Tennessee Technological University, USA); Feng Lin (Tennessee Technological University, USA); Jingzhi Yu (Tennessee Technological University, USA); Xia Li (Tennessee Technological University, USA); Yu Song (Tennessee Technological University, USA); Raghuram Ranganathan (Tennessee Tech University, USA); Nan Guo (Tennessee Tech University, USA); Robert Caiming Qiu (Tennessee Tech University, USA)

Spectrum Sensing for Cognitive Radio: A Signal-Processing Perspective on Signal-Statistics Exploitation

Chad M Spooner (NorthWest Research Associates, USA); Nilesh V Khambekar (University at Buffalo, USA)

Group Decoding for Interference Channels

Chen Gong (Columbia University, USA); Ali Tajer (Princeton University, USA); Xiaodong Wang (Columbia University, USA)

An Overview of Synchronization Algorithms for IR-UWB Systems

Rizwan Akbar (Universit  de Bretagne Occidentale, France); Emanuel Radoi (University of Brest & Lab-STICC UMR CNRS 3192, France)

16:00 - 18:00

GCNC: Green Computing, Networking and Communications

Room: Maui Suite 5

Chair: Mozghan Tavakolifard (Norwegian University of Science and Technology, Norway)

Outage-Storage Tradeoff in Smart Grid Networks with Renewable Energy Sources

Anwar Walid (Bell-labs, alcatel Lucent, USA); Kai Yang (Bell Labs, Alcatel-Lucent, USA)

GreenVLAN: An Energy-Efficient Approach for VLAN Design

Keqiang He (Tsinghua University, P.R. China); Yi Wang (Tsinghua University, P.R. China); Xiaofei Wang (Dublin City University, P.R. China); Wei Meng (Tsinghua University, P.R. China)

Wake Transition Decision algorithm for energy saving in OBS network with LPI

Dong-Ki Kang (Korea Advanced Institute of Science and Technology & Advanced Network and Computing Lab., Korea); Won-Hyuk Yang (Chonbuk National University, Korea); Jin-hyo Jung (Chonbuk National University, Korea); Young-Chon Kim (Chonbuk National University, Korea)

DDoS Discrimination by Linear Discriminant Analysis (LDA)

Theerasak Thapngam (Deakin University, Australia); Shui Yu (Deakin University, Australia); Wanlei Zhou (Deakin University, Australia)

IP I: Invited Papers I

Room: Regency A

Chair: Xiao-Ping Zhang (Ryerson University, Canada)

Trends and Opportunities in Consumer Video Content Navigation and Analysis

Junfeng Jiang (Ryerson University, Canada); Xiao-Ping Zhang (Ryerson University, Canada)

Data Organization in a hybrid storage system

Xiaojian Wu (Texas A&M University, USA); Narasimha Reddy (Texas A & M University, USA)

Noise and Interference Characterization for MLC Flash Memories

Jaekyun Moon (KAIST, Korea); Jaehyeong No (KAIST, Korea); Sangchul Lee (Hynix Semiconductor, Korea); Sangsik Kim (Hynix Semiconductor, Korea); Joongseob Yang (Hynix Semiconductor, Korea); Seung Ho Chang (Hynix, Korea)

Research on Wireless Multi-hop Networks: Current State and Challenges

Guoqiang Mao (The University of Sydney, Australia)

SPC I: Signal Processing for Communications I

Room: Maui Suite 4

Chairs: Irina C Cotanis (Ascom Network Testing, USA), Salam Elahmadi (Menara Networks, USA)

Time and frequency synchronization for ultra-high speed OFDM systems

Michael Dreschmann (Karlsruhe Institute of Technology, Germany); Joachim Meyer (KIT, Germany); Michael Häfner (Karlsruhe Institute of Technology (KIT), Germany); Rene Schmogrow (Karlsruhe Institute of Technology, Germany); David Hillerkuss (Karlsruhe Institute of Technology (KIT), Germany); Juergen Becker (University of Karlsruhe, Germany); Juerg Leuthold (University of Karlsruhe, Germany); Wolfgang Freude (Karlsruhe Institute of Technology (KIT) & Institute of Photonics and Quantum Electronics, Germany)

On The Performance of Joint Channel Estimation and PAPR Reduction Scheme

Youssef Nasser (American University of Beirut, Lebanon); Anh-Tai Ho (INSA, France); Jean-François H lard (IETR, France); Yves Lou t (SUPELEC-Rennes Campus, France)

A Novel channel allocation scheme in IEEE 802.22 systems

Seung-Hoon Hwang (Dongguk University, Korea)

Wideband compressed sensing for Cognitive Radios using optimum detector with no reconstruction

Jonathan Verlant-Chenet (Universit  Libre de Bruxelles, Belgium); Andre Bourdoux (IMEC, Belgium); Jean-Michel Dricot (Universit  Libre de Bruxelles, Belgium); Philippe De Doncker (ULB, Belgium); Fran ois Horlin (Universit  Libre de Bruxelles, Belgium)

Performance Analysis of Orthogonal Matching Pursuit under General Perturbations

Ding (Tsinghua University, P.R. China); Laming Chen (Tsinghua University, P.R. China); Yuantao Gu (Tsinghua University, P.R. China)

Greedy Pursuits: Stability of Recovery Performance against General Perturbations

Laming Chen (Tsinghua University, P.R. China); Jiong Chen (Tsinghua University, P.R. China); Yuantao Gu (Tsinghua University, P.R. China)

WN1: Wireless Networks I

Room: Maui Suite 1

Chair: Kevin Kwiat (Air Force Research Lab, USA)

Deadline-aware Broadcasting in Wireless Networks with Local Network Coding

Pouya Ostovari (Temple University & Computer and Information Sciences, USA); Jie Wu (Temple University, USA); Abdallah A Khreishah (Temple University, USA)

A Proposal of Power Saving Scheme for Wireless Access Networks with Access Point Sharing

Riichiro Nagareda (ATR, Japan); Akio Hasegawa (ATR Adaptive Communications Research Lab., Japan); Tatsuo Shibata (ATR Adaptive Communications Research Laboratories, Japan); Sadao Obana (Advanced Telecommunication Research Institute International, Japan)

Capacity Analysis of Best-Effort Broadcasting Services with Reliability Constraint

Minho Kim (Seoul National University, Seoul, Korea); Eun-Chan Park (Dongguk University, Korea); Kyung-Joon Park (DGIST, Korea); Chong-Ho Choi (Seoul National University, Korea)

MAC Layer Fairness in IEEE 802.11 DCF Based Wireless Mesh Networks
Sandip Chakraborty (Indian Institute of Technology, Guwahati, India);
Sukumar Nandi (Indian Institute of Technology, Guwahati, India)
Hybrid Resource Allocation Scheme in Two-hop Relaying WiMAX Networks
Yongchul Kim (North Carolina State University, USA); Mihail Sichitiu
(North Carolina State University, USA)

Wednesday, February 1

08:30 - 09:30

Keynote II: The Coming Decade of Data Center Networking Discontinuities

Speaker: Renato Recio, CTO, System Networking, IBM, USA

Room: Regency A

Chair: Guoliang Xue (Arizona State University, USA)

10:00 - 12:00

DSTA II: Codes and Algorithms for NVM and Storage Systems

Room: Maui Suite 4

Chair: Xinmiao Zhang (Case Western Reserve University, USA)

Characterization and Error-Correcting Codes for TLC Flash Memories

Eitan Yaakobi (University of California, San Diego, USA); Laura M

Grupp (University of California, San Diego, USA); Paul H. Siegel

(University of California, San Diego, USA); Steven Swanson

(University of California, San Diego, USA); Jack Wolf (UCSD, USA)

Robust Decoder Architecture for Multi-level Flash Memory Storage Channels

Ravi Hiranand Motwani (Intel Corporation, USA); Chong Ong (Intel

Corporation, USA)

An Improved Analytic Expression for Write Amplification in NAND Flash

Xiang Luo (University of Electro-Communications, Japan); Brian

Michael Kurkoski (University of Electro-Communications, Japan)

Dynamic Data Replication on Flash SSD Assisted Video-on-Demand Servers

Ramya Manjunath (Teradata Corporation, USA); Tao Xie (San Diego

State University, USA)

Low-Redundancy Two-Dimensional RAID Arrays

Jehan-Francois PÃ©ris (University of Houston, USA); Ahmed Amer

(University of California, Santa Cruz, USA); Thomas J.E. Schwarz

(Santa Clara University, USA)

A Novel Approach to Estimating Current and Future States of Technical Systems

Kirill Bushminkin (Lancaster University, United Kingdom); Denis Kolev (Moscow State University, Russia); Denis Rodionov (Lancaster University, United Kingdom); Lyudmila Mihaylova (Lancaster University, United Kingdom); Alexandra Vikhoreva (Institute of Physics of the Earth of Russian Academy of Science, Russia)

IT III: Invited Talks III

Room: Regency A

Chair: Victor CM Leung (The University of British Columbia, Canada)
Constrained Resource Optimization in Wireless Sensor Networks with Mobile Sinks

Weifa Liang (Australian National University, Australia)

Concurrent Bandwidth Aggregation over Wireless Networks

Dilip Krishnaswamy (Qualcomm, USA); Samir S. Soliman (Qualcomm, Inc, USA); Dirceu Cavendish (Qualcomm, USA); Srinivasa Eravelli (Qualcomm, USA); Danlu Zhang (Qualcomm, USA); Bibhu Mohanty (Qualcomm, USA); Weiyang Ge (Corporate R&D, Qualcomm Inc., USA)

Better Energy-Delay Tradeoff via Server Resource Pooling

Ioannis Kamitsos (Princeton University, USA); Lachlan L. H. Andrew (Swinburne University of Technology, Australia); Hongseok Kim (Sogang University, Korea); Sangtae Ha (Princeton University, USA); Mung Chiang (Princeton University, USA)

Towards a global IoT: Resource Re-utilization in WSNs

Sharief M.A. Oteafy (Queen's University, Canada); Hossam S. Hassanein (Queen's University, Canada)

MCC: Multimedia Computing and Communications

Room: Maui Suite 5

Chair: Sujit Dey (University of California, San Diego, USA)
Subjective Study on Asymmetric Stereoscopic Video with Low-pass Filtered Slices

Maryam Azimi (University of British Columbia, Canada); Sima Valizadeh (University of British Columbia, Canada); Xiaokang Li (University of British Columbia, Canada); Lino E. Coria (University of British Columbia, Canada); Panos Nasiopoulos (University of British Columbia, Canada)

Robust shape matching using global feature space representation of contours
Shehzad Khalid (Bahria University, Pakistan)

Fast Diamond Search Algorithm For Real Time Video Coding

Yasser Ismail (Umm Alqura University, Saudi Arabia); Sherif El-etriby (Umm Alqura University, Saudi Arabia)

Bandwidth Estimation and Rate Adaptation in HTTP Streaming

Bing Zhou (Tsinghua University, P.R. China); Jingyuan Wang (Tsinghua University, P.R. China); Zixuan Zou (Huawei Technologies Co. LTD, P.R. China); Jiangtao Wen (Tsinghua University, P.R. China)

Modeling, Characterizing, and Enhancing User Experience in Cloud Mobile Rendering

Yao Liu (UC San Diego, USA); Shaoxuan Wang (University of California, San diego, USA); Sujit Dey (University of California, San Diego, USA)

Novel Seamless Multimedia Service Framework Based on Context-Awareness and User Mobility Pattern in Ubiquitous Environments

Jinsung Byun (Chung-Ang University, Korea); Insung Hong (Chung-Ang University, Korea); Sehyun Park (Chung-Ang University, Korea)

WC II: System Performance Analysis

Room: Maui Suite 1

Chair: Oluwatobi O Olabiyi (Prairie View A&M University, USA)

Packet Error Rate-constrained Optimized Variable Rate Scheme for Convolutionally Coded M-QAM System

Krishna Nehra (King's College, London, United Kingdom); Mohammad Shikh-Bahaei (Kings college London, United Kingdom)

Asymptotic Performance Analysis of SC over Arbitrarily Correlated Nakagami-m Channels

Xianchang Li (University of British Columbia, Canada); Julian Cheng (University of British Columbia, Canada)

On the Performance of Redundant Residue Number System Codes Assisted STBC Design

Avik Sengupta (Kansas State University, USA); Dalin Zhu (NEC Laboratories China, P.R. China); Bala Natarajan (Kansas State University, USA)

New Alternative Series Representations for Generalized Nuttall Q-function with Applications

Oluwatobi O Olabiyi (Prairie View A&M University, USA); Annamalai Annamalai (Prairie View A&M University, USA)

13:30 - 15:30

MCVC

Room: Maui Suite 5

Chair: Mozghan Tavakolifard (Norwegian University of Science and Technology, Norway)

Applying Behavior Recognition in Road Detection Using Vehicle Sensor Networks

Yuanyuan Zeng (Wuhan University, P.R. China); Kai Xiang (Wuhan University & Hubei University of Economics, P.R. China); Deshi Li (Wuhan University, P.R. China)

Analysis of Mobility Patterns for Urban Taxi Cabs

Mohammad Asadul Hoque (The University of Alabama, USA); Xiaoyan Hong (University of Alabama, USA); Brandon Dixon (the University of Alabama, USA)

Transparent and Autonomous Store-carry-forward Communication in Delay Tolerant Networks (DTNs)

Frank Nordemann (University of Applied Sciences Osnabrueck, Germany); Ralf Tränkle (University of Applied Sciences Osnabrück, Germany)

Intelligent Interface Switching for Vehicular Communications

Kevin Lee (Cisco, USA); Xiaoqing Zhu (Cisco Systems, USA); Lillian Dai (Cisco & MIT, USA); Flavio Bonomi (Cisco Systems, USA); Jiang Zhu (Carnegie Mellon University, USA); Rong Pan (Cisco Systems Inc., USA); Sateesh Addepalli (Cisco, USA)

Throughput and Delay Analysis in Aeronautical Data Networks

Yufeng Wang (University of South Florida, USA); Mustafa Cenk Erturk (University of South Florida, USA)

Cognitive Multicast (CoCast) in Vehicular Networks Using OFDM Subchannels and Network Coding

Wooseong Kim (UCLA, USA); Brian Sung Chul Choi (University of California, Los Angeles, USA); Mario Gerla (University of California at Los Angeles, USA)

COG II: Cognitive Networking

Room: Maui Suite 1

Chair: Youping Zhao (Shared Spectrum Company, USA)

Delay Analysis and Optimal Access Strategy in Multichannel Dynamic Spectrum Access System

Xiao Li (University of Electronic Science and Technology of China, P.R. China); Jun Wang (University of Electronic Science and Technology of China, P.R. China); Husheng Li (University of Tennessee, USA); Shaoqian Li (University of Electronic Science and Technology of China, Taiwan)

Transient Analysis of Post-interruption Dynamics in Cognitive Radio Networks: An Onsager's Regression Approach

Husheng Li (University of Tennessee, USA)

Sensing Parameter Optimization Using a New Detection Probability in Cognitive Radio Networks

Jae-Kark Choi (Inha University, Korea); Sang-jo Yoo (Inha University, Korea)

Joint Optimization of Rate and Outer Loop Power Control for CDMA-based Cognitive Radio Network

Mohammad Mirtavoosi Mahyari (King's College London, United Kingdom)

Statistics of Aggregate Interference in Cognitive Wireless Ad hoc Networks

Alireza Babaei (Auburn University, USA); Prathima Agrawal (Auburn University, USA); Bijan Jabbari (George Mason University, USA)

BioStaR: A Bio-inspired Stable Routing for Cognitive Radio Networks

Mohammad Asadul Hoque (The University of Alabama, USA); Xiaoyan Hong (University of Alabama, USA)

IT IV: Invited Talks IV

Room: Regency A

Chair: Hossam S. Hassanein (Queen's University, Canada)

Applications of Fiber-connected Distributed Antenna Systems in Broadband Wireless Access

Alireza Attar (University of British Columbia, Canada); Haoming Li (University of British Columbia, Canada); Victor CM Leung (The University of British Columbia, Canada)

Strategies for Fault Tolerance in Optical Grid Networks

Ying Chen (University of Windsor, Canada); Ataul Bari (University of Western Ontario, Canada); Arunita Jaekel (University of Windsor, Canada)

Green IP over WDM Network Design Considering Energy-Load Proportionality

Chankyun Lee (KAIST, Korea); Yoontae Kim (Korea Advanced Institute of Science and Technology, Korea); June-Koo Kevin Rhee (KAIST, Korea)

Stochastic Network Calculus for Performance Analysis of Internet Networks - An Overview and Outlook

Yuming Jiang (Norwegian University of Science and Technology (NTNU), Norway)

WAHS I: Performance and Modeling

Room: Maui Suite 4

Chairs: Abdallah A Khreishah (Temple University, USA), S. Kami Makki (Lamar University, USA)

Characterization and Mitigation of the Energy Hole Problem of Many-to-One Communication in Wireless Sensor Networks

Heitor S Ramos (Universidade Federal de Minas Gerais & UFAL, Brazil); Eduardo M. R. Oliveira (Federal University of Minas Gerais, Brazil); Azzedine Boukerche (University of Ottawa, Canada); Alejandro C Frery (Universidade Federal de Alagoas, Brazil); Antonio A.F. Loureiro (Federal University of Minas Gerais, Brazil)

Constructing a Load-Balanced Virtual Backbone in Wireless Sensor Networks

Jing (Selena) He (Georgia State University, USA); Shouling Ji (Georgia State University, USA); Pingzhi Fan (Southwest Jiaotong University, P.R. China); Yi Pan (Georgia State University, USA); Yingshu Li (Georgia State University, USA)

A Routing-Algorithm-Aware Design Tool for Indoor Wireless Sensor Networks

Alberto Puggelli (University of California - Berkeley, USA); Mohammad Mozumdar (University of California, Berkeley, USA); Alberto Sangiovanni-Vincentelli (University of California at Berkeley, USA); Luciano Lavagno (Politecnico di Torino, Italy)

Modeling and Analysis of a Solar Powered Wireless Sensor Node

Hengzhao Yang (Georgia Institute of Technology, USA); Ying Zhang (Georgia Institute of Technology - Savannah, USA)

Real-Time Estimation of Wireless Ground-to-Air Communication Parameters

Anthony J. Carfang, Jr. (University of Colorado at Boulder, USA); Eric W. Frew (University of Colorado, USA)

16:00 - 18:00

IP II: Invited Papers II

Room: Regency A

Chair: Tamer ElBatt (Nile University, Egypt)

Taxonomy and Challenges of Rendezvous Algorithms in Cognitive Radio Networks

Hai Liu (Hong Kong Baptist University, Hong Kong); Zhiyong Lin (Hong Kong Baptist University, Hong Kong); Xiaowen Chu (Hong Kong Baptist University, Hong Kong); Yiu-Wing Leung (Hong Kong Baptist University, Hong Kong)

Cognitive Radio Technology's Principles and Practice

Youping Zhao (Beijing Jiaotong University, P.R. China); Lizdabel Morales-Tirado (University of Puerto Rico & Mayaguez Campus, USA)
Coexistence in two-tier femtocell networks: cognition and optimization
Siew Eng Nai (Institute for Infocomm Research, Singapore); Tony Q. S. Quek (Institute for Infocomm Research, Singapore)

NAPP: Network Architectures & P2P Protocols

Room: Maui Suite 5

Chair: Jalal N Almhana (Universite de Moncton, Canada)

PeerMate: A Malicious Peer Detection Algorithm for P2P Systems based on MSPCA

Xianglin Wei (PLA University of Science and Technology, P.R. China);
Tarem Ahmed (International Islamic University Malaysia, Malaysia);
Ming Chen (Institute of Communications Engineering, P.R. China); Al-Sakib Khan Pathan (International Islamic University Malaysia (IIUM), Malaysia)

Efficient and Flexible Inter-Overlay Scheduling of Media Streams for Multi-Channel P2P Streaming

Xin Jin (The University of Hong Kong, Hong Kong); Yu-Kwong Kwok (University of Hong Kong, Hong Kong)

P2P Streaming; Impact of Bandwidth Throttling on QoS

Jalal N Almhana (Universite de Moncton, Canada); Zikuan Liu (NRC, Canada)

P2P Packet Cache Router for Network-Wide Traffic Redundancy Elimination

Shu Yamamoto (University of Tokyo, Japan); Akihiro Nakao (University of Tokyo, Japan)

A Novel Cost-Effective Architecture and Deployment Strategy for Integrated RFID and WSN Systems

Fadi M. Al-Turjman (Queen's University, Canada); Ashraf E. Al-Fagih (Queen's University, Canada); Hossam S. Hassanein (Queen's University, Canada)

SPC II: Signal Processing for Communications II

Room: Maui Suite 4

Chairs: Seung-Hoon Hwang (Dongguk University, Korea), Youssef Nasser (American University of Beirut, Lebanon)

Aspects Related to Geo Localization Based on Mobile's Measurements in WCDMA Wireless Networks

Irina C Cotanis (Ascom Network Testing, USA); Le Le (Ascom Network Testing Inc., USA)

Beamforming-based Interference Cancellation for Multiuser MIMO Downlink Communications

Yen-Hsu Chiang (National Tsing Hua University, Taiwan); Hsi-Pin Ma (National Tsing Hua University, Taiwan)

Achievable Rate for Amplify and Forward Relay System at Low SNR

YU BI (Wichita State University, USA); Yanwu Ding (Wichita state university, USA); Hyuck Kwon (Wichita State University, USA)

Capacity Analysis of Relay Channels for Medium Voltage Powerline Access Network

Kyong-Hoe Kim (Seoul National University, Korea); Han-Byul Lee (Seoul National University, Korea); Yong-Hwa Kim (Seoul National University, Korea); Jong-Ho Lee (Kongju National University, Korea); Seong-Cheol Kim (Seoul National University, Korea)

Capacity and Modeling of Nonlinear Fiber Optic Communications as a Frequency-Selective Fading Channel

Salam Elahmadi (Menara Networks, USA); Mandyam Srinath (Southern Methodist University, USA); Dinesh Rajan (Southern Methodist University, USA); Richard Haberman (SMU, USA)

WN2: Wireless Networks II

Room: Maui Suite 1

Chair: Jian Tang (Syracuse University, USA)

Game Theoretic Analysis of Users and Providers Behavior in Network under Scarce Resources

Charles A Kamhoua (Air Force Research Laboratory & Information Directorate, USA); Niki Pissinou (Florida International University, USA); Kia Makki (Technological University of America (TUA), USA)

Scheduling of Wireless Metering for Power Market Pricing in Smart Grid

Husheng Li (University of Tennessee, USA)

Design and Implementation of Industrial Network Monitoring Protocol for Networked Industrial Sensors

Daegil Yoon (Samsung Electro Mechanics, Korea); Hee Seok Ho (Samsung Electro Mechanics, Korea); Jaehee Park (Samsung Electro Mechanics, Korea)

A Tale of Four Cities: Wireless Security & Growth in New Zealand

Alastair Nisbet (Unitech, New Zealand)

Framework for Co-operative RFID Tag Reading in Mobile Environments with Multiple Readers

Chandrika Satyavolu (The University of Oklahoma, USA); Sridhar Radhakrishnan (University of Oklahoma, USA); Venkatesh Sarangan

(Oklahoma State University, USA); Thomas Landers (University of Oklahoma, USA)

Thursday, February 2

08:30 - 09:30

Keynote III: When Coding Met Video QoE

Speaker: Muriel Medard, Professor, MIT, USA

Room: Regency A

Chair: Vahid Tarokh (Harvard University, USA)

10:00 - 12:00

CQSM

Room: Maui Suite 4

Chair: Zuqing Zhu (University of Science and Technology of China, P.R. China)

RocketTC: A High Throughput Traffic Classification Architecture

Zhou Zhou (Beijing Institute of Technology, P.R. China); Tian Song (Beijing Institute of Technology, P.R. China); Wenliang Fu (Beijing Institute of Technology, P.R. China)

Packet Reception Ratios in Two-Dimensional Broadcast Ad Hoc Networks
Xiaomin Ma (Oral Roberts University, USA)

Optimised network resource exploitation in interactive broadcasting environments via P2P constellations

Evangelos Markakis (University of the Aegean, Greece); Evangelos Pallis (Technological Educational Institute of Crete, Greece); Harry Skianis (University of the Aegean, Greece); Vassilios Zacharopoulos (Technological Educational Institute of Crete, Greece)

Inter-Domain Service Alignment Using Consensus

Vitor Jesus (Universidade de Aveiro & Instituto de Telecomunicações, Portugal); Rui L Aguiar (University of Aveiro & Instituto de Telecomunicações, Portugal); Peter Steenkiste (Carnegie Mellon University, USA)

Performance of Multiuser CDMA Receivers With Bursty Traffic and Delay Constraints

Kashif Mahmood (Norwegian University Of Science and Technology, Norway); Mikko Vehkaperä (Royal Institute of Technology (KTH),

Sweden); Yuming Jiang (Norwegian University of Science and Technology (NTNU), Norway)
Cycle Time Distribution and Control for the Deficit Round Robin Packet Scheduler
Gary Chang (Northwestern University, USA); Chung-Chieh Lee (Northwestern University, USA)

CSS: Communication Services and Applications

Room: Maui Suite 5

Chair: Weifeng Sun (Dalian University of Technology, P.R. China)

Performance Evaluation of a Context Provisioning Middleware

Eike Reetz (University of the West of England & University of Applied Sciences Osnabrück, United Kingdom); Michael Knappmeyer (University of Applied Sciences Osnabrück & University of the West of England, Germany); Saad Liaquat Kiani (University of the West of England & UWE, United Kingdom); Nigel Baker (University of the West of England, United Kingdom); Ralf Trnjes (University of Applied Sciences Osnabrück, Germany)

A CoAP-Gateway for Smart Homes

Olaf Bergmann (Universitaet Bremen, Germany); Kai Hillmann (Universitaet Bremen, Germany); Stefanie Gerdes (Universitaet Bremen, Germany)

Characterizing Top User Behavior of Sina Microblogging in the Context of Different Events

Yubao Zhang (National University of Defense Technology, P.R. China); Hui Wang (National University of Defense Technology, P.R. China); Zhihong Jiang (National University of Defence Technology, P.R. China); Pei Li (National University of Defense Technology, P.R. China)

FoSSicker: A Personalized Search Engine by Location-Awareness

Mingyang Sun (Dalian University of Technology, P.R. China); Weifeng Sun (Dalian University of Technology, P.R. China); Lei Shu (Osaka University, Japan); Mingchu Li (Dalian University of Technology, Canada); Lei Xue (Dalian University of Technology, P.R. China)

IP III: Invited Papers III

Room: Regency A

Chair: Mario Gerla (University of California at Los Angeles, USA)

Vehicular Networks and Applications: Challenges, Requirements and Service Opportunities

- Junyi Li (Qualcomm, USA); Michal Wã³dczak (Telcordia Technologies, Inc., Poland); Xinzhou Wu (Qualcomm, USA); T. Russell Hsing (Telcordia Technologies, USA)
- Vehicular Testbeds - Validating Models and Protocols before Large Scale Deployment
 Mario Gerla (University of California at Los Angeles, USA); Jui-Ting Weng (University of California, Los Angeles, USA); Eugenio Giordano (University of California at Los Angeles & UniversitÃ di Bologna, USA); Giovanni Pau (UCLA, USA)
- MIMO VANETS: Research Challenges and Opportunities
 Amr El-Keyi (Nile University, Egypt); Tamer ElBatt (Nile University, Egypt); Fan Bai (General Motors, USA); Cem Saraydar (General Motors R&D, USA)
- Modeling of Packet Dropout for UAV Wireless Communications
 Yifeng Zhou (Communications Research Centre, Canada); Jun Li (Communications Research Centre of Canada, Canada); Louise Lamont (Communications Research Centre Canada, Canada); Camille-Alain Rabbath (Defence R&D Canada, Canada)

WC III: MIMO technology

Room: Maui Suite 1

Chair: Youssef Nasser (American University of Beirut, Lebanon)

Coordinated MultiPoint Uplink Capacity over a MIMO Composite Fading Channel

Symeon Chatzinotas (University of Luxembourg, Luxembourg); BjÃ¶rn Ottersten (KTH Royal Institute of Technology, Sweden)

Lattice Reduction-Aided Minimum Mean Square Error K-Best Detection for MIMO Systems

SÃ©bastien Aubert (Research unit IETR, France); Youssef Nasser (American University of Beirut, Lebanon); Fabienne Nouvel (INSA, France)

Layered Block Diagonalization for Base Station Cooperated Multiuser MIMO with Partial Channel State Information Feedback

Kenichi Higuchi (Tokyo University of Science, Japan)

MISO Amplify Forward Scheme and its Viability

Narayanan Krishnan (WINLAB, Rutgers, The State University of New Jersey, USA); Bala Natarajan (Kansas State University, USA)

Multiple Input Multiple Output Dirty Paper Coding: System Design and Performance

Zouhair J. Al-qudah (/EE/southern Methodist University/Dallas, USA); Dinesh Rajan (Southern Methodist University, USA)

Multiuser MIMO Capacity with Limited Feedback Trellis Exploration Based Precoder

Sayak Bose (Kansas State University, USA); Bala Natarajan (Kansas State University, USA); Dalin Zhu (NEC Laboratories China, P.R. China)

13:30 - 15:30

CIS: Secure Communications and Networking

Room: Maui Suite 4

Chair: Hongjie Zhu (University of Pennsylvania & Hong Kong University of Science and Technology, USA)

On the use of Enhanced Bogon Lists (EBLs) to detect malicious traffic

Ravi Vaidyanathan (Telcordia Technologies Inc., USA); Abhrajit Ghosh (Telcordia Technologies Inc., USA); Yukiko Sawaya (KDDI R&D Laboratories, Inc., Japan); Ayumu Kubota (KDDI R&D Laboratories Inc., Japan)

Gabor-Based RF-DNA Fingerprinting for Classifying 802.16e WiMAX Mobile Subscribers

Donald Reising (AF Institute of Technology, USA); Michael A Temple (Air Force Institute of Technology, USA); Mark E Oxley (Air Force Institute of Technology, USA)

A Physical Layer Security Analysis on the Electric-Field Intra-Body Communication

Hongjie Zhu (University of Pennsylvania & Hong Kong University of Science and Technology, USA); Wai Chiu Ng (Hong Kong University of Science & Technology, Hong Kong); Hengying Shan (Hong Kong University of Science & Technology, Hong Kong); Jie George Yuan (Hong Kong University Science and Technology, P.R. China)

Achievable Secrecy Rates in Physical Layer Secure Systems with a Helping Interferer

Arsenia Chorti (Princeton University & University College London, USA); H. Vincent Poor (Princeton University, USA)

Intrusion Detection in IT Networks with Limited Observations

Praveen Bommannavar (Stanford University, USA); Nicholas Bambos (Stanford University, USA)

NAPE: Network Algorithms & Performance Evaluation

Room: Maui Suite 5

Chair: Zuqing Zhu (University of Science and Technology of China, P.R. China)

Call Admission Control with Resource Reservation for Multi-service OFDM Networks

Mehdi Khabazian (QUWIC, Qatar); Osama Kubbar (QU Wireless Innovation Centre & Senior IEEE Member, Qatar); Hossam S. Hassanein (Queen's University, Canada)

Self-tuning Batching in Total Order Broadcast Protocols via Analytical Modelling and Reinforcement Learning

Paolo Romano (Inesc-ID, Portugal); Matteo Leonetti (Sapienza Rome University, Italy)

Survivable Routing Using Path Criticality

Alireza Bigdeli (University of Toronto, Canada); Ali Tizghadam (University of Toronto, Canada); Alberto Leon-Garcia (University of Toronto, Canada)

Effect of Mobility on the Performance of Amplify-and-Forward Cooperation in SC-FDMA System

Youssef Nasser (American University of Beirut, Lebanon); Joumana Farah (Holy-Spirit University of Kaslik, Lebanon); Joseph Kirillos (USEK, Lebanon); Stephanie Bassil (USEK, Lebanon); Maryline HÃ©lard (INSA Rennes & IETR Institute of Electronics and Telecommunications of Rennes, France)

A Client-side Split-ACK Tool for TCP Slow Start Investigation

Michael Welzl (University of Oslo, Norway); Rolf Normann (University of Oslo, Norway)

Solving Many to Many Multicast QoS Routing Problem using DCA and Proximal Decomposition Technique

Anh Son Ta (CRP Henri Tudor, Luxemburg); Hoai-An Le Thi (Laboratory of Theoretical and Applied Computer Science, France); Dinh Tao Pham (Laboratory of Modelling, Optimization and Operations Research, France); Djamel Khadraoui (CRP Henri Tudor, Luxemburg)

WAHS II: Performance and Security

Room: Regency A

Chair: Jing (Selena) He (Georgia State University, USA)

Improving Robustness of Key Extraction from Wireless Channels with Differential Techniques

Bin Zan (RUTGERS, USA); Marco Gruteser (WINLAB / Rutgers University, USA); Fei Hu (University of Alabama, USA)

Simultaneous Optimization of Transmission Range and Actor Movement in WSANs

- Hyunbum Kim (The University of Texas at Dallas, USA); Jorge A. Cobb (The University of Texas at Dallas, USA)
- On the Analysis of Identity Delegation Attacks
Issa M Khalil (United Arab Emirates University & Faculty of Information Technology, UAE); Abdallah A Khreishah (Temple University, USA)
- E-BOP: A Simple and Efficient Enhancement of ZigBee's BOP protocol
Shunsuke Takagawa (University of Doshisha, Japan); Mehdad N. Shirazi (NICT, Japan); Jun Cheng (Doshisha University, Japan)
- Utilizing Silent Negative Voting and Sleep/Wakeup method for Power-Efficient Data Fusion
S. Kami Makki (Lamar University, USA); Bo Sun (Lamar, USA); Ramon Sandoval (Lamar, USA)
- Channel Assignment for WLAN by Considering Overlapping Channels in SINR Interference Model
Kunxiao Zhou (City University of Hong Kong, Hong Kong); Xiaohua Jia (City University of Hong Kong, Hong Kong); Liming Xie (City University of Hong Kong, P.R. China); Yanan Chang (City University of Hong Kong, Hong Kong); Xing Tang (City University of Hong Kong, Hong Kong)

WC IV: Channel Assesment and design

Room: Maui Suite 1

Chair: Brian Michael Kurkoski (University of Electro-Communications, Japan)
Iterative Nonlinear Precoding and Link Adaptation for MU-MIMO with CSI Impairments

Hongsan (Harry) Sheng (InterDigital Communications LLC, USA);
Yingxue Li (InterDigital Comm LLC, USA)

Channel Estimation for TDS-OFDM Transmit Diversity Systems over Doubly Selective Channels

Lujing Geng (Tsinghua, P.R. China); Jintao Wang (Tsinghua University, P.R. China); Changyong Pan (Tsinghua University, P.R. China); Ai Bo (Beijing Jiaotong University, P.R. China)

Closed Form Evaluation of Area under ROC of Cooperative Relay-Based Energy Detection in Cognitive Radio Networks

Oluwatobi O Olabiyi (Prairie View A&M University, USA); Annamalai Annamalai (Prairie View A&M University, USA)

Error Performance of Cooperative Diversity with Distributed Space-Time Code
Peng Huo (University of Mississippi, USA); Lei Cao (The University of Mississippi, USA)

Dynamic Spectrum Access Analysis in a Multi-User Cognitive Radio Network using Markov Chains

H. Patrick Ngallema (Université du Québec à Montréal, Canada); Wessam Ajib (Université du Québec à Montréal, Canada); Halima Elbiaze (University of Quebec at Montreal, Canada)

Noise Impact Factor in the Performance of Interference-Limited Diversity Combining Antenna Arrays

Sebastien Roy (Laval University, Canada)

16:00 - 18:00

IT V: Invited Talk - Distributed Beamforming in Relay-Interference Networks

Speaker: Hamid Jafarkhani, Univ. California, Irvine, USA

Room: Regency A

N2Women: N2Women Meeting

Room: Maui Suite 4

Chair: Mozghan Tavakolifard (Norwegian University of Science and Technology, Norway)

SCLD: Special Session on Cloud Media

Room: Maui Suite 1

Chair: Zuqing Zhu (University of Science and Technology of China, P.R. China)

Cloud Mobile Media: Opportunities, Challenges, and Directions

Sujit Dey (University of California, San Diego, USA)

CoDaaS: An Experimental Cloud-Centric Content Delivery Platform for User-Generated Contents

Yichao Jin (Nanyang Technological University, Singapore); Yonggang Wen (Nanyang Technological University, Singapore); Guangyu Shi (Huawei Technologies Co., Ltd, P.R. China); Guoqiang Wang (Huawei, USA); Athanasios V. Vasilakos (National Technical University of Athens, Greece)

Toward Green Service in Cloud: From the Perspective of Scheduling

Liang Zhou (Nanjing University of Posts and Telecommunications, P.R. China); Baoyu Zheng (Nanjing University of Posts and Telecommunications, P.R. China); JingWu Cui (Nanjing University of Posts And Telecomm, P.R. China); Sulan Tang (Nanjing University of Posts and Telecommunications, P.R. China)

Efficient and Scalable Cloud-Assisted SVC Video Streaming Through Mesh Networks

Suoheng Li (University of Science and Technology of China, P.R. China); Zuqing Zhu (University of Science and Technology of China, P.R. China); Houqiang Li (University of Science and Technology of China, P.R. China); Weiping Li (University of Science and Technology of China, P.R. China)

Cloud-Assisted Streaming for Low Latency Applications

Xiaoqing Zhu (Cisco Systems, USA); Jiang Zhu (Carnegie Mellon University, USA); Rong Pan (Cisco Systems Inc., USA); Mythili Suryanarayana Prabhu (Advanced Architecture and Research & Cisco Systems, USA); Flavio Bonomi (Cisco Systems, USA)