

**Wednesday, April 20**  
**Holiday Inn Kensington Forum**

**IEEE Xplore Papers & Big Data Analytics for Telecommunications Workshop**

**Paper Presentation Session (I - A)**  
**Ad Hoc and Sensor Networks I**  
**Chair: Robert Stewart, Athlone Institute of Technology, Ireland**

*Infrastructure Centric AQM approach for QoS in MANETs*  
Alexis Tcach (Universidad de Buenos Aires & Universidad General Sarmiento, Argentina); Rodrigo Castro (University of Buenos Aires & CONICET, Argentina); Esteban E. Mocskos (University of Buenos Aires & Center for Technological Applications - CSC - CONICET, Argentina)

*Hello Message Scheme Enhancement in CRMANET*  
Jingwen Bai (Queen Mary, University of London, P.R. China); Tao Liang (Queen Mary University of London, P.R. China); Yan Sun and Chris Phillips (Queen Mary University of London, United Kingdom)

*A Residual Battery-Aware Routing Algorithm Based on DSR for BLE Sensor Networks*  
Zonglin Guo (University of California Irvine, USA); Ian Harris and Christopher Harris (UC Irvine, USA); Yutong Jiang (Northeastern University, USA); Lih-feng Tsaur (University of Southern California, USA)

*A Novel Lightweight Authentication Scheme for heterogeneous Wireless Sensor Networks in the context of Internet of Things*  
Hamza Khemissa (University of Sciences and Technology Houari Boumediene & Research Center on Scientific and Technical Information (CERIST), Algeria); Djamel Tandjaoui (Research Center on Scientific and Technical Information (CERIST), Algeria)

*A Trust-Privacy Framework in Vehicular Ad Hoc Networks (VANET)*  
Diep Pham (Nanyang Technical University, Singapore); Chai Kiat Yeo (Nanyang Technical University, Singapore)

**Paper Presentation Session (I - B)**  
**Wireless Modeling, Algorithms and Simulation 1**  
**Chair: Dina Simunic, University of Zagreb, Croatia**

*Congestion-Aware RPL for 6LoWPAN Networks*  
Hayder Al-Kashoash, Yaarob Al-Nidawi and Andrew H. Kemp (University of Leeds, United Kingdom)

*Channel modeling and path loss characterization for in-body propagation at MICS and ISM bands*  
Theofilos Chrysikos and Iliana Zisi (University of Patras, Greece); Stavros Kotsopoulos (Wireless Telecommunications Laboratory, Greece)

*Optimal Entropy Quantization for Maximum Likelihood Estimation based Cooperative Spectrum Sensing*  
Oluyomi Simpson, Idris Abdulkadir Yusuf and Yichuang Sun (University of Hertfordshire, United Kingdom)

*Analysis on Multipath Shape Factors of Air-to-Ground Radio Communication Channels*  
Sardar Muhammad Gulfam (Comsats Institute of Information Technology, Pakistan); Junaid Nawaz Syed (COMSATS Institute of Information Technology, Islamabad, Pakistan); Abrar Ahmed (COMSATS Institute of Information Technology, Pakistan); Mohammad N Patwary (Staffordshire University, Stafford, United Kingdom)

*Effects of HPA Nonlinearities Mitigation for Amplitude, Phase and their Joint Distortions using MIMO Communication Systems*  
Latif Jan (Iqra National University Peshawar, Pakistan); Mohammad Haseeb Zafar (University of Engineering and Technology, Peshawar, Pakistan); Shahryar Khan Afridi, Shahrs (Iqra National University Peshawar Pakistan, Pakistan)

**Paper Presentation Session (I - C)**  
**Wireless Resource Management and Efficiency**  
**Chair: Michael Bartolacci, Penn State University - Berks**

*A Dynamic States Reduction Message Passing Algorithm for Sparse Code Multiple Access*  
Yue Zhou (Huawei Technologies, Co. Ltd., P.R. China); Hejia Luo (Huawei Technologies Co., Ltd., P.R. China); Rong Li (Huawei Technologies, Co. Ltd., P.R. China); Justin Wang (Huawei Technologies Co. Ltd, P.R. China)

*Resource Management in OFDMA Heterogeneous Network*

	<p>Maria Seimeni, Panagiotis Gkonis, Dimitra I Kaklamani and Iakovos S. Venieris (National Technical University of Athens, Greece); Christos Papavassiliou (Imperial College London, United Kingdom)</p> <p><i>Fast and Efficient Transmission in D2D-Assisted Cellular Networks</i> Yao-Liang Chung (National Taiwan Ocean University, Taiwan)</p> <p><i>An Improved Metric-Based Active Constellation Extension Scheme for PAPR Reduction in OFDM Systems</i> Chin-Liang Wang, Shun-Sheng Wang and Hung-Mien Chen (National Tsing Hua University, Taiwan)</p> <p><i>RSS Fingerprints Dimensionality Reduction in WLAN-based Indoor Positioning</i> Ayah Abusara (American University of Sharjah, UAE); Mohamed Hassan (American University of Sharjah, UAE); Mahmoud Ismail (Cairo University, Egypt)</p>
8:30 am – 10:10 am	<p><b>Paper Presentation Session (I – D)</b> <b>Big Data Analytics for Telecommunications</b> <b>Chair: Ye Ouyang, Verizon Wireless</b></p> <p><i>Evaluating LTE Accessibility Performance Via Clustering Based Model: A Wireless Analytic Methodology</i> Yan Wang (Xidian University, P.R. China); Zhensen Wu (Xidian university, P.R. China)</p> <p><i>Big Data Management: An Investigation into Wireless and Cloud Computing</i> Sunny Orike (Rivers State University of Science and Technology, Port Harcourt, Nigeria); Daboso Brown (National Open University of Nigeria, Nigeria)</p> <p><i>Identifying Dissatisfied 4G Customers from Network Indicators: A Comparison Between Complaint and Survey Data</i> Alexis Huet and Xinling Dai (Nanjing Howso Technology, P.R. China)</p> <p><i>Mining of Leaders in Mobile Telecom Social Networks</i> Ouyang Ye (Stevens Institute of Technology, USA); Alexis Huet (Nanjing Howso Technology, P.R. China); Mantian Hu (The Chinese University of Hong Kong, Hong Kong); Xingshuai Sun (Nanjing Howso Technology, P.R. China)</p> <p><i>Elliptic Curves Cryptosystem Based Approach for Keys Authentication in WSN</i> Youcef Touati (University of Paris 8 SAINT-DENIS &amp; Dept. MIME, France)</p>
10:10 am – 10:20 am	<p><b>Break</b></p>
10:20 am – 12:00 pm	<p><b>Paper Presentation Session (II - A)</b> <b>Ad Hoc and Sensor Networks 2 and Mobile Health</b> <b>Chair: Robert Stewart, Athlone Institute of Technology, Ireland</b></p> <p><i>Trust Management using Probabilistic Energy-Aware Monitoring for Intrusion Detection in Mobile Ad-hoc Networks</i> Andrea Lupia and Floriano De Rango (University of Calabria, Italy)</p> <p><i>Energy-Efficient Data Aggregation Techniques for Exploiting Spatio-Temporal Correlations in Wireless Sensor Networks</i> Somasekhar Reddy Kandukuri (University of La Reunion, France); Jean Lebreton (University of La Reunion &amp; LE2P Laboratory, France); Richard Lorion (University La Réunion, France); Nour Mohammad Murad (University of Reunion, France); Jean-Daniel Lan Sun Luk (LE2P, Reunion)</p> <p><i>An energy-efficient addressing mechanism for wake-up radio systems</i> Jean Lebreton (University of La Reunion &amp; LE2P Laboratory, France); Nour Mohammad Murad (University of Reunion, France); Somasekhar Reddy Kandukuri (University of La Reunion, France); Richard Lorion (University La Réunion, France)</p> <p><i>Multi-hop Cooperative Relaying for Energy Efficient In Vivo Communications</i> Muhammad Ismail (Texas A&amp;M University at Qatar, Qatar); Marwa Qaraqe (Texas A&amp;M University, USA); Qammer Hussain Abbasi (Texas A &amp; M University, Qatar); Erchin Serpedin (Texas A&amp;M University, USA)</p> <p><i>Mood Prediction from Facial Video with Music "Therapy" on a Smartphone</i> Chai Kiat Yeo, Yean Seanglidet and Bu Sung Lee (Nanyang Technological University, Singapore)</p>

<p>10:20 am – 12:00 pm</p>	<p><b>Paper Presentation Session (II – B)</b> <b>Emerging Wireless Technologies and Applications 1</b></p> <p><i>Timing Synchronization for OFDM-based Visible Light Communication System</i> Marcos Fulgencio Guerra Medina, Oswaldo González, Inocencio R. Martín and Silvestre Rodríguez (University of La Laguna, Spain)</p> <p><i>Open source 6Lo protocol stack for wireless embedded systems</i> Artem Yushev (Offenburg University of Applied Sciences &amp; Offenburg University of Applied Sciences, Germany); Axel Sikora (University of Applied Sciences Offenburg, Germany); Jubin Sebastian E (Offenburg University of Applied Sciences, Germany)</p> <p><i>Data Exchange via Multiplexed Color QR Codes on Mobile Devices</i> Sin Rong Toh (NTU, Singapore); Weihan Goh (Singapore Institute of Technology, Singapore); Chai Kiat Yeo (Nanyang Technological University, Singapore)</p> <p><i>Comparison between multi-mode monopulse and step tracking techniques for a UAV satellite terminal</i> Jaemooon Lee (Agency for Defense Development, Korea); Jae Sung Lim (Ajou University, Korea); Eunki Kim (LIGNex1, Korea)</p> <p><i>Wireless Multihoming for Smart Grid High Data Rate Applications</i> Atef Abdrabou and Hosam Hittini (UAE University, UAE); Khaled Bashir Shaban (Qatar University &amp; College of Engineering, Qatar)</p> <p><i>Interoperability of IoT Wireless Technologies in Ambient Assisted Living Environments</i> Antonija Marincic (FER, Croatia), Antun Kerner (FER, Croatia), Dina Simunic (University of Zagreb, Croatia)</p>
<p>10:20 am – 12:00 pm</p>	<p><b>Paper Presentation Session (II - C)</b> <b>Propagation and Transmission Modeling</b></p> <p><i>New Circularly Polarized Matrix Antenna for Space Applications</i> Ali Siblini (Limoges University, France)</p> <p><i>Effect of Transmit Multi-Port Amplifiers Used in Base Stations for Wireless Cellular Systems</i> Shigeo Nakajima (Niigata Institute of Technology, Japan)</p> <p><i>Capacity-approaching signals for the scalar Gaussian channel</i> Hugo Méric (NIC Chile Research Labs, Chile); Jerome Lacan (University of Toulouse, France)</p> <p><i>Congestion Analysis for Low Power and Lossy Networks</i> Hayder Al-Kashoash, Yaarob Al-Nidawi and Andrew H. Kemp (University of Leeds, United Kingdom)</p>
<p>12:00 pm – 1:40 pm</p>	<p style="text-align: center;"><b>Lunch</b> <b>Best Paper Awards Ceremony</b> <b>Poster Paper Session</b></p>
	<p style="text-align: center;"><b><i>International Journal of Interdisciplinary Telecommunications &amp; Networking Papers</i></b></p>
<p>1:40 pm – 3:20 pm</p>	<p><b>Paper Presentation Session (III - A)</b> <b>Wireless Modeling, Algorithms and Simulation 2</b> <b>Chair: Stephen Curran, Digicel Group</b></p> <p><i>Mobility Analysis for Passive Reservations in Vehicular Cellular Networks Based on Dynamic Programming and Roads Compression</i> Peppino Fazio and Mauro Tropea (University of Calabria, Italy); Miroslav Voznak (VSB – Technical University of Ostrava, Czech Republic); Andrea Lupia (University of Calabria, Italy)</p>

	<p><i>Cellular IoT for Mobile Autonomous Reporting in the Smart Grid</i> Ana E Goulart (Texas A&amp;M University, USA)</p> <p><i>Fade duration based neighbor cell list optimization for the handover in femtocell networks</i> Aklilu Gebremichail (University of Missouri-Kansas City, USA)</p> <p><i>A novel secret key generation method in OFDM system for physical layer security</i> Dong Wang, Hu Aiqun and Linning Peng (Southeast University, P.R. China)</p> <p><i>Analysis on Interference Impact of Wi-Fi on Digital Terrestrial Television Broadcasting</i> Guntis Ancans (Riga Technical University, Latvia); Evaldas Stankevicius (Vilnius Gediminas Technical University, Lithuania); Vjaceslavs Bobrovs and Arnis Ancans (Riga Technical University, Latvia)</p>
1:40 pm – 3:20 pm	<p><b>Paper Presentation Session (III - B)</b> <b>Wireless Resource Management and Efficiency</b></p> <p><i>Three-Dimension Kronecker Channel Modeling and Correlation Analysis</i> Jianzheng Li (Nanjing University of Posts and Telecommunications, P.R. China); Fei Li (Nanjing University of Posts and Telecommunications, P.R. China); Wei Ji (Nanjing University of Posts and Telecommunications, P.R. China); Yulong Zou (Nanjing University of Posts and Telecommunications, P.R. China); Chunguo Li (Southeast University, P.R. China)</p> <p><i>Improved Port Modulation for Multiuser massive MIMO systems</i> Yujiao He, Jianing Zhao, Lijuan Tao, Fuyu Hou and Wei Jia (Southeast University, P.R. China)</p> <p><i>Throughput Analysis of IEEE 802.11ac and IEEE 802.11n in a Residential Home Environment</i> Zawar Shah and Ashutosh Kolhe (Whitireia Community Polytechnic, Auckland, New Zealand)</p> <p><i>Dynamic Resource Management in High Throughput Satellite with Multi Port Amplifier (MPA)</i> Sunil Panthi (University of California Irvine, USA); Ahmed M. Eltawil (University of California, Irvine, USA)</p>
1:40 pm – 3:20 pm	<p><b>Paper Presentation Session (III - C)</b> <b>Emerging Wireless Technologies and Applications 2</b></p> <p><i>The use of an airborne platform to provide emergency communications</i> Stephen Curran (Digicel Group, Jamaica)</p> <p><i>3D Replica Conferencing System</i> Roger Achkar (American University of Science and Technology, Lebanon)</p> <p><i>Application of Signal Processing GPS Signal Detection Using USRP</i> Ehsan Sheybani, Brandon Harrington (Virginia State University, USA)</p> <p><i>Integrating Software Defined Radio with USRP</i> Ehsan Sheybani, Aleeyah Hopkins (Virginia State University, USA)</p>
1:40 pm – 3:20 pm	<p><b>Paper Presentation Session (III - D)</b> <b>Global Wireless Services, Business &amp; Applications</b> <b>Chair: Galen Grimes, Penn State University</b></p> <p><i>Changes in Corporate Strategy in the Telecommunications Services Industry: A Fifteen Year Retrospective</i> Steven R. Powell (California State Polytechnic University, Pomona)</p> <p><i>EMV, Apple Pay, Android Pay, and other Alternate Payment Technologies—Is it finally Safe to Use Credit/Debit Cards?</i> Galen Grimes (Penn State University)</p> <p><i>Data Centers: Current Status, Cyber Security, Compliance, and Next Generation</i> J. P. Shim (Georgia State University)</p> <p><i>Disconnects of specialized mobile digital forensics within the generalized field of digital forensic science</i> Gregory H. Carlton (California State Polytechnic University, Pomona); Gary C. Kessler (Embry-Riddle Aeronautical University)</p> <p><i>Semi-autonomous traffic control at intersections utilizing radios and sensors.</i> Zory Marantz (New York City of Technology)</p>

<p>3:20 pm – 3:30 pm</p>	<p style="text-align: center;"><b>Break</b></p>
<p>3:30 pm –5:30 pm</p>	<p><b>Paper Presentation Session (IV- A)</b>  <b>Emerging Wireless Technologies and Applications 3</b>  <b>Chair: Dina Simunic (University of Zagreb)</b></p> <p><i>Modelling Wireless Sensor Networks in IoT-Based Home Sensing Environment</i>  Ana Koren (FER, Croatia); Antun Kerner (Faculty of Electrical Engineering and Computing (FER), Croatia); Dina Simunic (University of Zagreb, Croatia)</p> <p><i>A Study of Forensic Imaging to Evaluate Unsanitized Destination Storage Media</i>  Gregory H. Carlton (California State Polytechnic University, Pomona, USA); Gary C. Kessler (Embry-Riddle Aeronautical University, USA)</p> <p><i>Application of Digital Signal Processing in USRP Satellite Signal Detection</i>  Giti Javidi, Candice Brown (Virginia State University, USA)</p> <p><i>Using Simulations and Computational Analyses to Study a Frequency-Modulated Continuous-Wave Radar</i>  Akbar Eslami, Jamiiru Luttamaguzi, Dwayne M. Brooks (Elizabeth City State University, USA); Giti Javidi, Philip M. Gabriel (Virginia State University, USA)</p> <p><i>Energy-efficient Joint Power Allocation and Relay Selection in Bit Error Rate Constrained Two-Way Relay Network</i>  Rashi Mehrotra (Indian Institute of Technology, India); Ranjan Bose (Indian Institute of Technology, India)</p>
<p>3:30 pm –5:30 pm</p>	<p><b>Paper Presentation Session (IV- B)</b>  <b>Propagation and Transmission Modeling</b></p> <p><i>Linear Precoding for Large MIMO Configurations and QAM Constellations</i>  Thomas Keteoglou (California State Polytechnic University, Pomona, USA); Ender Ayanoglu (University of California, Irvine, USA)</p> <p><i>Power Efficient Communication for Joint Detection Receivers in Rician Channels</i>  Vignesh Kumar (IIT Madras, India)</p> <p><i>Channel modeling and path loss characterization for in-body propagation at MICS and ISM bands</i>  Theofilos Chrysikos and Iliana Zisi (University of Patras, Greece); Stavros Kotsopoulos (Wireless Telecommunications Laboratory, Greece)</p> <p><i>Repetition Coding and Equal Power Allocation Scheme for JPEG Image Transmission over MIMO Systems</i>  Chuahry Mujeeb Ahmed (Singapore University of Technology and Design, Singapore)</p>
<p>3:30 pm –5:30 pm</p>	<p><b>Paper Presentation Session (IV - C)</b>  <b>Ad Hoc and Sensor Networks 2</b>  <b>Chair: Robert Stewart, Athlone Institute of Technology</b></p> <p><i>Mobile Data Offloading for Streaming-class Traffic with QoS Guarantee</i>  Anusree Ajith (IIT Madras, India); Venkatesh Tiruchirai Gopalakrishnan (Indian Institute of Technology Madras, India)</p> <p><i>A Residual Battery-Aware Routing Algorithm Based on DSR for BLE Sensor Networks</i>  Zonglin Guo (University of California Irvine, USA); Ian Harris and Christopher Harris (UC Irvine, USA); Yutong Jiang (Northeastern University, USA); Lih-feng Tsaor (University of Southern California, USA)</p> <p><i>A Mobility Model for Crowdsensing Simulation</i>  Jose Nava Auza (Pontifícia Universidade Católica do Rio de Janeiro &amp; Centro de Estudos em Telecomunicações, Brazil); José Roberto B. de Marca (PUC/Rio, Brazil)</p> <p><i>Energy Efficient Cognitive M2M Communications</i>  Sajad Alabadi (University of Greenwich, United Kingdom)</p>

**Paper Presentation Session (IV - D)**

**Emerging Media**

**Chair: Vassiliki Cossiavelou, Aegean University - Youth and Media Lab; Communication Counsellor at State, Belgium**

*Brands and media gatekeeping in the social media: Current trends and practices - an exploratory research*

Georgia-Zozeta Miliopoulou (DEREE - The American College of Greece, Greece); Vassiliki Cossiavelou (Aegean University, Youth and Media Lab & Communication Counsellor at State, Belgium)

3:30 pm

–5:30 pm

*ACTA: An online media content gatekeeper or a facilitator of e/m business? The EU role as global negotiator*

Vassiliki Cossiavelou (Aegean University, Youth and Media Lab & Communication Counsellor at State, Belgium)

*Smart Advertising*

Albert Asmaryan (Moscow State Technical University, Russia); Aleksey Levanov and Irina Borovik (Moscow State Technical University named after Bauman, Russia)

*Social and location analysis for similarity assessment*

Albert Asmaryan (Moscow State Technical University, Russia); Aleksey Levanov and Irina Borovik (Moscow State Technical University named after Bauman, Russia)