WTS 2018 Paper Presentation Sessions
Friday, April 20, 2018

Ocotillo Golf Club

International Journal of Interdisciplinary Telecommunications & Networking Papers and Invited Presentations

Friday, April 20

7:30 am – 10:10 am

I-A Wireless Security & Smart Health

Efficient Unsupervised Learning to Secure Communication for Wireless Sensor Network Middleware
Remah A. Alshinina (University of Bridgeport, USA); Khaled M. Elleithy (School Of Engineering, University Of Bridgeport, USA)

A Self Organizing Map Intrusion Detection System for RPL Protocol Attacks
Roger Achkar, Elie Kfouri And Julien Saab (American University Of Science And Technology, Lebanon); Paul Younes (American University Of Science And Technology &amp; Lebanon, Lebanon)

Attack-Tree Based Risk Assessment on Cloud-Oriented Wireless Body Area Network
Theodoros Mavroeidakos (University of Piraeus, Greece); Nikolaos Tsolis (University Of Piraeus, Greece); Dimitrios D. Vergados (University Of Piraeus, Greece)

Modelling an Intrusion Detection System Based on Adaptive Immunology
Vishwa Teja Alaparthy and Salvatore Domenic Morgera (University of South Florida, USA)

Non-Gradient Based PDF Approximation for Sensor Selection in Cognitive Sensor Network
Mohammad Reza Ghavidel Aghdam (University Of Tabriz, Iran); Reza Abdolee (California State University, Bakersfield, USA); Seyed Kamal Seyyedi Sahvari And Behzad Mozaffari Tazehkand (University Of Tabriz, Iran)

Assessing the Level of Physical Activity In The Workplace: A Case Study With Wearable Technology
Jose Manjarres, Pedro Narvaez, Maria Calle, Mauricio Pardo And Winston Percybrooks (Universidad Del Norte, Colombia)

In-Body Multi-Band Channel Modeling for Smart Health Applications
Theofilos Chrysikos And Dimitrios Tyrovolas (University Of Patras, Greece); Stavros Kotsopoulos (Wireless Telecommunications Laboratory, Greece)

7:30 am – 10:10 am

I-B Physical, MAC & Network Layers (I)

A Low Power IoT Medium Access Control for Receiver-Assigned CDMA
Eric Petrosky (Virginia Tech Hume Center, USA); Alan J Michaels (Virginia Tech; Hume Center for National Security and Technology, USA); Joseph M. Ernst (Virginia Tech, USA)

MAC and Routing Support Cognitive Radio Integrated Multi-hop Testbed
Gyu-min Lee, Cheol-Woong Lee and Byeong-hee Roh (Ajou University, Korea)

Factors Influencing the PAPR Performance of OFDM and MIMO-OFDM Systems: A Comparison Study
Tahreer Mahmood (Electrical/Computer Engineering; University of Arkansas at Little Rock USA, USA)

MIMO Throughput of Wireless Access Networks
Dean Thelen and Anthony Ng'oma (Corning Incorporated, USA); David Peters (Corning Incorporated)

Study on Orthogonalization Spacing of Antenna Arrays for Spatial Multiplexing in a millimeter-wave massive MIMO System
Chun-Hsiang Huang (NTT, Japan); Atsushi Ohta (NTT Network Innovation Laboratories, Japan); Kazuto Goto (Company &amp; NTT, Japan); Yushi Shirato (NTT, Japan); Yutaka Imazumi (Nippon Telegraph and Telephone Corporation, Japan); Naoki Kita (Nippon Telegraph and Telephone Corp., Japan)

An Improved Data Collection Algorithm for Wireless Sensor Networks
Vemula Manohar Reddy, Min Kyung An and Hyuk Cho (Sam Houston State University, USA)
### Low-complex hybrid massive MIMO for downlink single-antenna multiuser wireless cellular networks
Homeyra Rahbari Kahjough (University of Tabriz, Iran); Reza Abdolee (California State University, Bakersfield, USA); Behzad Mozaffari Tazehkand (University of Tabriz, Iran)

Invited Presentation:
*Development of a Graphical User Interface For RF and Satellite Communications*
Ehsan Sheybani (University of South Florida, USA); Giti Javidi (University of South Florida Sarasota-Manatee, USA)

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<th>10:10 am – 10:20 am</th>
<th><strong>Break</strong></th>
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<tr>
<th>10:20 am – 12:00 pm</th>
<th>II-A Wireless Business, Policy, and Applications</th>
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<tr>
<td>Invited Presentation:</td>
<td><em>The Communications Ecosystem: Structure &amp; Process</em></td>
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<td>Steven Powell (California State Polytechnic University, Pomona, USA)</td>
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<td>Invited Presentation:</td>
<td><em>Fake news: The internet giants in a new post-gatekeeping role</em></td>
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<td>Vassiliki Cossiavelou (Aegean University, Youth and Media Lab &amp; Communications Counsellor at State, Belgium); Valentinos Tzekas (FightHoax, Greece)</td>
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<td>Invited Presentation:</td>
<td><em>Adaptive Computing at the Nodes of Fog and Cloud: Smart IoT</em></td>
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<td>Ehsan Sheybani (University of South Florida, USA); Giti Javidi (University of South Florida Sarasota-Manatee, USA)</td>
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<td><em>Internet of Things for a Smart Transportation System</em></td>
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<td>Ahmed Awad and Seshadri Mohan (University of Arkansas at Little Rock, USA)</td>
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| 12:00 pm – 1:00 pm | **Lunch**
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<td><strong>Best Paper Awards Ceremony</strong></td>
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### IEEE Xplore Papers

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<tr>
<th>1:00 pm – 3:20 pm</th>
<th>III-A Physical, MAC &amp; Network Layers (II)</th>
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<tr>
<td></td>
<td><em>Modified CS-based Downlink Channel Estimation With Temporal Correlation in FDD Massive MIMO Systems</em></td>
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<tr>
<td></td>
<td>Xiaohui Bi, Jianing Zhao, Gang Wang, Yuting Lu, Lei Zhou and Duyang Li (Southeast University, P.R. China)</td>
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**Device-to-Device Communications in the millimeter Wave Band: A Novel Distributed Mechanism**
Niloofar Bahadori and Nima Namvar (North Carolina A&T State University, USA); Brian T Kelley (University of Texas at San Antonio, USA); Abdollah Homaifar (North Carolina A&T State University, USA)

**Modeling Millimeter Wave Tropospheric Attenuations for UAS and Terrestrial Aviation Communications**
Jinwen Liu and David W Matolak (University of South Carolina, USA)

**31 GHz Path Loss Measurement and Modeling for Indoor/Outdoor Environments**
Mohanad Mohsen and David W Matolak (University of South Carolina, USA)

**An Efficient Wireless Access Point Selection Algorithm for Location Determination Based on RSSI Interval Overlap Degree Determination**
Bang Wu, Zixiang Ma and Stefan Poslad (Queen Mary University of London, United Kingdom (Great Britain)); Wei Zhang (Wuhan University, P.R. China)

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**III-B Wireless Modeling, Algorithms, Simulations, and Analytics (II)**

**Autoencoder-based Network Anomaly Detection**
Zhaomin Chen, Chai Kiat Yeo, Bu Sung Lee and Chiew Tong Lau (Nanyang Technological University, Singapore)

**Pareto Optimization for Uplink NOMA Power Control**
Eren Balevi and Richard D. Gitlin (University of South Florida, USA)

**Cooperative New Flow Handling Scheme for Wireless Multi-hop Software Defined Networks**
Yan Sun and Bizhu Wang (Queen Mary University of London, United Kingdom (Great Britain)); Xiaodong Xu (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, P.R. China)

**Automated Oscillation Detection and Correction of Fused Wearable Sensor Signals using Machine Learning**
Seanglidet Yean, Bu Sung Lee, Chai Kiat Yeo and Zhaomin Chen (Nanyang Technological University, Singapore)

**Detecting Traffic Anomaly in Wireless Networks, An Analytics Methodology**
Ye Quyang (Verizon, USA); Zhongyuan Li (Verizon Wireless, USA); Le Su, Wenyuan Lu, Zhenyi Lin and Wei Jiang (Verizon Wireless, USA)

**Near-Instant Link Failure Recovery in 5G Wireless Fog-Based-Fronthaul Networks**
Nabeel Sulieman, Eren Balevi and Richard D. Gitlin (University of South Florida, USA)

**Theoretical Performance Evaluation of System Capacity in Multi-user MIMO THP with Ordering**
Hiroyumi Suganuma, Nobuhiro Hiruma and Fumiaki Maehara (Waseda University, Japan)

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**3:20 pm – 3:30 pm**  
**Break**

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**IV-A Wireless Business, Policy, and Applications (II)**

**User Throughput-Based Quality of Experience**
Bhavesh Hiranandani and Mahasweta Sarkar (San Diego State University, USA); Albena Mihovska (Aarhus University, Denmark); Aniruddha Das (ViaSat Inc, USA)

**Automated Class-based Compression for Real-Time Epileptic Seizure Detection**
Alaa Awad Abdellatif and Amr Mohamed (Qatar University, Qatar); Carla-Fabiana Chiasserini (Politecnico di Torino, Italy)

**Personalized Recommendation for Weibo Comic Users**
Yan Sun (Queen Mary University of London, United Kingdom (Great Britain)); Haoran Lyu (Beijing University of Posts and Telecommunications, P.R. China); Xu Liu and Peng Xu (Beijing University of Posts and Telecommunications, P.R. China)

**Predictive Self-Learning Content Recommendation System for Multimedia Contents**
Husnu S Narman (Marshall University, USA)

**Secure Multi-protocol Gateway for Internet of Things**
Amiruddin Amiruddin (Universitas Indonesia & Sekolah Tinggi Sandi Negara, Indonesia); Anak Agung Putri Ratna (Faculty of Engineering, University of Indonesia, Indonesia); Riri Fitri Sari (Universitas Indonesia, Indonesia); Ruki Harwahyu (Universitas Indonesia & Sekolah Tinggi Sandi Negara, Indonesia)
**A Highly Accurate Machine Learning Approach for Developing Wireless Sensor Network Middleware**
Remah A Alshinina (University of Bridgeport, USA); Khaled M. Elleithy (School of Engineering, University of Bridgeport, USA)

**On Improving Imputation Accuracy of LTE Spectrum Measurements Data**
Aizaz U Chaudhry (Communications Research Center, Canada); Wei Li (Communications Research Centre, Canada); Amir Ali Basri and François Patenaude (Communications Research Centre Canada, Canada)

**SAGE Algorithm Based MAP Channel Estimation for Multi-Cell Massive MIMO Systems**
Senol Sancar (Istanbul Zaim University, Turkey)

**IV-B Physical, MAC & Network Layers (III)**

**Adjustment of Firing Phase Changing Probability in Extended-Desync TDMA**
Cheol-Woong Lee, Gyu-min Lee and Byeong-hee Roh (Ajou University, Korea)

**A Software-Defined Networking framework for IoT based on 6LoWPAN**
Fabian F Jurado Lasso (University of Melbourne, Australia); Ken Clarke and Ampalavanapillai Nirmalathas (The University of Melbourne, Australia)

**A New Routing Protocol for UAV Relayed Tactical Mobile Ad Hoc Networks**
Beom-Su Kim (GNU, Korea); Ki-II Kim (Chungnam National University, Korea); Bongsoo Roh and Hyungseok Choi (Agency for Defense Development, Korea)

**Measurement-based characterization of the 3.5 GHz channel for 5G-enabled IoT at complex industrial and office topologies**
Theofilos Chrysikos, Panagiotis Georgakopoulos and Iliana Oikonomou (University of Patras, Laboratory, Greece)

**Channel Access Mechanisms for Video Streaming over LTE-Unlicensed**
Fatema Aseeri, Mohamed Hassan and Mahmoud H. Ismail Ibrahim (American University of Sharjah, United Arab Emirates)

**Energy Efficient Sensor Selection Method in Cooperative Spectrum Sensing with Low-Complexity**
Nastaran Vatankhah Barazande (University of Tabriz, Iran); Reza Abdolee (California State University, Bakersfield, USA); Behzad Mozaffari tazehkand and Hadi Seyedarabi (University of Tabriz, Iran)

**A VHO Scheme for Supporting Healthcare Services in 5G Vehicular Cloud Computing Systems**
Dimitrios D. Vergados (University of Piraeus, Greece); Emmanouil Skondras (UNIPI, Greece); Angelos Michalas (Technological Education Institute of Western Macedonia, Greece)

**Simulation-based Optimization for Reconfiguration of Mobile Wireless Sensor Network**
Hyoshin Park and James Headen (North Carolina A&T State University, USA)

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**WTS 2018 Poster Papers**
**Thursday, April 19, 2018**

**Applicability of Human Immune System to Intrusion Detection in WSN’s**
Vishwa Alaparthy and Salvatore D. Morgera (University of South Florida, USA)

**M2M Communications for Ubiquitous Smart Home System Using Android Application**
Wael Alsafery and Balraddin Alturki (Leicester University, UK); Kamal Jambi (King Abdulaziz University, Saudi Arabia)