

**IEEE IWCMC 2020**  
**Technical Program at a Glance**  
**Limassol, Cyprus, June 15<sup>th</sup> — 19<sup>th</sup>, 2020**

DATE	TIME	ROOM				
<b>June 15, 2020</b> (Monday)		<b>ROOM 1</b>				
	9:00-12:00	<b>T1:</b> A Roadmap for Free Space Optics Communications; <b>By:</b> Abderrahmen Trichili, Boon S. Ooi, Med-Slim Alouini (KAUST, KSA); Mitchell Cox (University of the Witwatersrand, South Africa)				
	12:00-13:30	<b>LUNCH BREAK</b>				
	14:00-17:00	<b>T3:</b> Opportunities, Challenges and Layered Architecture of VLC Systems: Towards a Practical Design For LiFi Networks <b>By:</b> Chadi Assi & M. A. Arfaoui, Concordia University, Canada				
<b>TUTORIALS</b>	19:00-20:00	<b>WELCOME RECEPTION</b>				
<b>June 16, 2020</b> (Tuesday)		<b>ROOM 1</b>	<b>ROOM 2</b>	<b>ROOM 3</b>	<b>ROOM 4</b>	
	8:30 - 9:00	<b>WELCOME &amp; OPENING</b>				
	9:00-10:00	<b>KEYNOTE 1:</b> Prof. Raouf Boutaba, University of Waterloo, Canada <b>TITLE:</b> Self-driving Networks: Challenges and Opportunities				
	10:00-10:30	<b>Coffee Break</b>				
	10:30-12:30	TM-1	TM-2	TM-3	TM-4	
	<b>TECHNICAL SESSIONS</b>	12:30-13:30	<b>LUNCH BREAK</b>			
	13:30-15:30	TA-1	TA-2	TA-3	TA-4	
	15:30-16:00	<b>Coffee Break</b>				
	16:00-18:00	TA-5	TA-6	TA-7	TA-8	
	<b>NIGHT OUT (On your Own)</b>					
<b>June 17, 2020</b> (Wednesday)	9:00-10:00	<b>KEYNOTE 2:</b> George K. Karagiannidis, Aristotle University of Thessaloniki, Greece <b>TITLE:</b> Lightning up the wireless communications: Opportunities, challenges and misconceptions				
	10:00-10:30	<b>Coffee Break</b>				
	10:30-12:30	WM-1	WM-2	WM-3	WM-4	
	<b>TECHNICAL SESSIONS</b>	12:30-13:30	<b>LUNCH BREAK</b>			
	13:30-15:30	WA-1	WA-2	WA-3	WA-4	
	15:30-16:00	<b>Coffee Break</b>				
	16:00-18:00	WA-5	WA-6	WA-7	WA-8	
19:00-21:00	<b>DINNER BANQUET</b>					
<b>June 18, 2020</b> (Thursday)	9:00-10:00	<b>KEYNOTE 3:</b> Nidal Nasser, Alfaisal University, KSA <b>TITLE:</b> Blockchain for IoT: Applications and Challenges				
	10:00-10:30	<b>Coffee Break</b>				
	10:30-12:30	ThM-1	ThM-2	ThM-3	ThM-4	
	<b>TECHNICAL SESSIONS</b>	12:30-13:30	<b>LUNCH BREAK</b>			
	13:30-15:30	ThA-1	ThA-2	ThA-3	ThA-4	
	15:30-16:00	<b>Coffee Break</b>				
	16:00-18:00	ThA-5	ThA-6	ThA-7	ThA-8	
	<b>NIGHT OUT (On your Own)</b>					
<b>June 19, 2020</b> (Friday)	8:30-10:30	FrM-1	FrM-2	FrM-3	FrM-4	
	10:30-11:00	<b>Coffee Break</b>				
	11:00-13:00	FrM-5	FrM-6	FrM-7	FrM-8	
	<b>TECHNICAL SESSIONS</b>	13:00-13:30	<b>LUNCH BREAK</b>			
	13:30-15:30	FrA-1	FrA-2	FrA-3	FrA-4	
	15:30-14:00	<b>Coffee Break</b>				
	16:00-18:00	FrA-5	FrA-6	FrA-7	FrA-8	

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## **Technical Sponsors:**



**TECHNICAL PROGRAM**  
**IEEE IWCMC 2020**  
**Limassol, Cyprus, June 15<sup>th</sup> — 19<sup>th</sup>, 2020**

**Monday, June 15<sup>th</sup>, 2020**

**Tutorial 1 — (9:00 - 12:00)**

**Room: 1**

- **Speakers:** Abderrahmen Trichili, Boon S. Ooi, Med-Slim Alouini (KAUST, KSA)  
Mitchell Cox (University of the Witwatersrand, South Africa)
  - **Title:** A Roadmap for Free Space Optics Communications
  - **Chair:** Chadi Abou-Rjeily, [chadi.abourjeily@lau.edu.lb](mailto:chadi.abourjeily@lau.edu.lb), Lebanese American University, Lebanon
- Meeting Link:** <https://lau.webex.com/lau/j.php?MTID=ma92a60822ebf5a0788601056d4bb39b9>

**BREAK**

**12:00 – 13:30**

**Tutorial 3 — (14:00 - 17:00)**

**Room: 2**

- **Speaker:** Chadi Assi & M. A. Arfaoui, Concordia University, Canada
  - **Title:** Opportunities, Challenges and Layered Architecture of VLC Systems: Towards a Practical Design for LiFi Networks
  - **Chair:** Azzam Mourad, [azzam.mourad@lau.edu.lb](mailto:azzam.mourad@lau.edu.lb), Lebanese American University, Lebanon
- Meeting Link:** <https://lau.webex.com/lau/j.php?MTID=m09ea779a09a8a6a3911bad291174b3ac>  
**Meeting number:** 163 620 4301, **Password:** kkRmcG3cC68

### Monday Morning Sessions (MM) — (10:30 12:30)

- **Session Title:** V2X Communications & Networking (5G-EWNAT Workshop) **MM-1: Room: 1**
- **Session Chair:** Yin Xu, [xuyin@sjtu.edu.cn](mailto:xuyin@sjtu.edu.cn), Shanghai Jiaotong University, China
- **Meeting Link:** <https://zoom.us/j/4211344183> - **Conferece ID: 421 134 4183**

**1570622055:** A Semi-centralized security framework for in-vehicle networks, Ivan Edmar Carvajal Roca; Jian Wang; Jun Du (Tsinghua University, Beijing, China); Shuangqing Wei (Louisiana State University, USA)

**1570622293:** Two Beam Resource Scheduling Strategies for Multi-RF-Chain Based V2I Communication, Yijia Feng; Jiahao Wang; Dazhi He; Yin Xu; Yunfeng Guan (Shanghai Jiao Tong University, China); Yu Zhang; Wei Xie (Academy of Broadcasting Science, Beijing, China)

**1570629117:** Contour-Based V2V Channel Cluster Identification Algorithm, Runnan Liu; Yihang Huang; Dazhi He; Yin Xu (Shanghai Jiao Tong University, China); Yu Zhang (Academy of Broadcasting Science, China)

**1570630151:** A novel method on resource allocation for V2X, Weimin Xing; Haigang He; Youxiong Lu; Jin Yang; Yuzhou HU; Lin Chen (ZTE Corporation, China)

**1570629248:** Highly Selective Filter for Suppressing Interference of 5G Signals to C-band Satellite Receiver, Jinlin Yang, Yan Zhang (Beihang University, China); Dongsheng Zhang (Beijing BBEF Science & Technology Co., Ltd, China); Tao Hong; Qinlu Liu; Da Sun; Aoyong Dong; Shanwei Lv (Beihang University, China)

### Monday Afternoon Sessions (MA) — (13:30 - 15:30)

- **Session Title:** Satellite Physical Layer Communications (Satellite Symposium) **MA-1: Room: 1**
- **Session Chair:** Chunxiao Jiang, [jchx@tsinghua.edu.cn](mailto:jchx@tsinghua.edu.cn) (Tsinghua University, China)
- Link:** <https://meetingsapac26.webex.com/meetingsapac26/j.php?MTID=m4ae5bfe70531e506fb4cdd0b52d8cfc8>
- Meeting ID:** 166 735 1537, **Password:** EYm5MfNFu57 (39656363 from video systems)

**1570622426:** An Adaptive Carrier and Symbol Synchronization Approach for QPSK Signal, Zhiming Yang; Xin Ji; Zhiyi Song; Liyan Qiao; Yang Yu; Xiyuan Peng (Harbin Institute of Technology, China)

**1570629202:** Iterative Doppler Frequency Offset Estimation in Low SNR Satellite Communications, Jiawei Wang; Chunxiao Jiang; Linling Kuang (Tsinghua University, China); Song Guo (The Hong Kong Polytechnic University, Hong Kong)

**1570630024:** Dynamic Perturbation Decoding of Polar-CRC Cascaded Code, Dongliang Xiao (China Agricultural University, China); Zhenzhen Gu (China Agricultural University, China)

**1570633311:** Iterative Joint Carrier-Frequency Offset Estimation and Channel Decoding for Satellite Narrowband IoT Transmission System, Ze Run Huang (Sun Yat-sen University, China); Yun Liu (The 54th Research Institute of China Electronics Technology Group Corporation, China); Xiang Chen; Jie Gong (Sun Yat-sen University, China); Rui-liang Song (CETC54, China)

**1570634271:** Code Design for Noncoherent Detection in Satellite Communication Systems, Michel Kulhandjian (University of Ottawa & Carleton University, Canada); Hovannes K. Kulhandjian (California State University, Fresno, USA); Claude D'Amours (University of Ottawa, Canada)

- **Session Title:** Multimedia Communications (Multimedia Symposium) **MA-2: Room: 2**
- **Session Chair:** Liang Zhou, [liang.zhou@njupt.edu.cn](mailto:liang.zhou@njupt.edu.cn), Nanjing University of Posts & Telecom., Nanjing, China
- **Session Co-Chair:** Xin Wei, [xwei@njupt.edu.cn](mailto:xwei@njupt.edu.cn), Nanjing University of Posts & Telecom., Nanjing, China
- Meeting Link:** <https://www.webex.com/>, **Meeting Number:** 126 508 2037, **Password:** yTMMJp3wC33

**1570621703:** Federated Quantile Regression over Networks, Liqi Huang; Xin Wei; Peikang Zhu; Yun Gao; Mingkai Chen; Bin Kang (Nanjing University of Posts and Telecommunications, China)

**1570630282:** Parallel Streaming for a Multi-homed Dash client, Ali Hodroj (Lebanese University, Lebanon); Marc Ibrahim (Saint Joseph University, Lebanon); Yassine Hadjadj-Aoul (University of Rennes 1, France)

**1570630402:** Computation Offloading With Reinforcement Learning in D2D-MEC Network, Gaibin Li; Mingkai Chen; Xin Wei; Ting Qi; Wenqin Zhuang (Nanjing University of Posts and Telecommunications, China)

**1570630452:** QoE-Driven Distributed Content Segments Sharing with Service Differentiation in D2D Network, Yiming Song; Mingkai Chen; Xin Wei; Ting Qi; Xuguang Zhang (Nanjing University of Posts and Telecommunications, China)

**1570632379:** Inferring Quality of Experience for Adaptive Video Streaming over HTTPS and QUIC, Tisa Selma (UAEU, UAE); Abdelhak Bentaleb (NUS, Singapore); Saad Harous (UAE University, UAE)

**1570633542:** Evaluation of the capacity usage efficiency of LTE networks with impatient video streaming users, Samah Abo Sakr (Beirut Arab University & E-Solution, Lebanon); Amal Abdel Razzac (Lebanese University, Lebanon); Youmni Ziade

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| <p>➤ <b>Session Title:</b> Smart Grid Communications (Intelligent Network Computing Workshop)</p> <p>➤ <b>Session Chair:</b> Kaixuan Wang, <a href="mailto:wangkx@sxufe.edu.cn">wangkx@sxufe.edu.cn</a> (Shanxi University of Finance and Economics, China)</p> <p><b>Link:</b> <a href="https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=mb5041551f072c90ce4e2d73eff2371d0">https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=mb5041551f072c90ce4e2d73eff2371d0</a></p> <p><b>Meeting number:</b> 165 747 6929, <b>Password:</b> uVKJefK9u38, <b>Host key:</b> 253592</p> | <p><b>MA-3: Room: 3</b></p> |
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- 1570621431:** A Backup Network Planning Method for Electric Power Communication Network, Beibei Zhi (Wuhan Univ., China); Geng Zhang and Yang Wang (China Electric Power Res. Institute, China); Hao Jiang (Wuhan University, China)
- 1570628120:** Electric Theft Behavior Detection Method Based on Power Customer Data Analysis, Yang Xue (China Electric Power Res. Institute Co., Ltd., China); Yifei Shu (State Grid Ningxia Electric Power Res. Institute Co., Ltd., China); Heng Yang (State Grid Co., Ltd., China); Sha Liu and Yinghui Xu (China Electric Power Research Institute Co., Ltd., China)
- 1570628389:** Characteristics of Electricity Consumption of Typical Industrial Loads Based on Power Data Analysis, Sha Liu, Yining Yang and Yang Xue (China electric power research institute co., Ltd, China); Zilong Wang and Heng Yang (State Grid Co., Ltd, China); Yinghui Xu, Cong Wang and Liu Yang (China electric power research institute co., Ltd, China)
- 1570628397:** Fault Diagnosis Algorithm of AC Transmission Controller Based on PLC Technology, Mingxin Qiu (Shandong Vocational College of Light Industry, China)
- 1570629395:** A Spectrum Allocation Method Based On Load Balancing For Heterogeneous Networks Of Smart Grid, Wenjing Li (State Grid Information & Telecommunication Group Ltd, China); Yanru Wang (Beijing Fibrlink Communications Co Ltd, China); Yilong Chen (State Grid Shanghai Municipal Electric Power Company, China); Wenjie Ma, Hui Liu and Jie Zhang (Beijing Fibrlink Communications Co. Ltd, China); Diya Ran and Yiqi Zhao (BUPT, China)
- 1570630574:** Reliability Analysis and Optimization Algorithm of Power Communication Network Based on Resource Association Features, Zhiyuan Ye (Anhui Jiyuan Software Co. LTD, China); Zhiyu Chen (State Grid Information & Telecommunication Branch, China); Pengcheng Ni, Qiang Pu and Linglong Li (Anhui Jiyuan Software Co. LTD, China)

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| <p>➤ <b>Session Title:</b> WSN and IoT Applications (WSNs Symp.)</p> <p>➤ <b>Session Chair:</b> George Hadjichristofi, <a href="mailto:ghadjich@gmail.com">ghadjich@gmail.com</a>, Eur. University, Cyprus &amp; Richie Leo (ZTE, China)</p> <p><b>Meeting Link :</b> <a href="https://meetingsamer22.webex.com/meet/pr1269048798">https://meetingsamer22.webex.com/meet/pr1269048798</a>, 1269048798</p> | <p><b>MA-4: Room: 4</b></p> |
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- 1570621436:** A Wearable LoRa-Based Emergency System for Remote Safety Monitoring, Gaby Bou Tayeh (Université de Bourgogne Franche Comté, France); Joseph Azar (Femto ST, France); Abdallah Makhoul; Christophe Guyeux (University of Franche-Comté, France); Jacques Demerjian (Lebanese University, Lebanon)
- 1570622337:** Fuzzy C-Means based Clustering Algorithm in WSNs for IoT Applications, Rahil Bensaid (National School of Engineers of Gabes); Hatem Boujemaa; Maymouna Ben Said (Ecole Supérieure des Communications, Tunisia)
- 1570625190:** Text Data Truth Discovery Using Self-confidence of Sources, Faxue Yang (Dalian University of Technology, China); Kun Lu; Mingchu Li (Dalian University of Technology, China); Yuanfang Chen (Hangzhou Dianzi University & Universite Pierre et Marie CURIE, China); Mohsen Guizani (Qatar University, Qatar)
- 1570630705:** Pose detection with backscattered visible light sensing utilizing a single RGB photodiode: A model based feasibility study, Andreas Weiss (Industriestrasse 6 & Joanneum Research, Austria); Saman Zahiri Rad and Franz Wenzl (Joanneum Research, Austria)
- 1570630759:** A multi-wire based technique for leak detection and localization in underground water pipelines, Raouia Khelif (CRNS, ENIS, Tunisia); Mohamed Kharrat (The University of Tokyo, Japan); Manel Elleuchi (CRNS, ENIS, Tunisia); Abdulfattah M. Obeid (KACST, Saudi Arabia); Mohamed Abid (CES-ENIS, Tunisia)
- 1570634300:** Using Water Filling technique and SVD decomposition for cooperative node selection in WSN, Lamia Grira; Ridha Bouallegue (Innov'COM Laboratory, Sup'Com University of Carthage, Tunisia)

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| <p>➤ <b>Session Title:</b> PHY layer for IoT I (5G-IoT Symp.)</p> <p>➤ <b>Session Chair:</b> Xiangming Li, <a href="mailto:xmli@bit.edu.cn">xmli@bit.edu.cn</a>, <a href="mailto:xiangming_li@ieee.org">xiangming_li@ieee.org</a> (Beijing Institute of Technology, China)</p> <p><b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m51baad4dcdb29f19efdc00e643846b13">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m51baad4dcdb29f19efdc00e643846b13</a></p> | <p><b>MA-5: Room: 5</b></p> |
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- 1570617472:** An Improved Puncturing Scheme for Polar Codes; Wei Liu, Yue Wang and Ao Li (Chongqing University of Posts and Telecommunications, China); Peng Yu and Fanqin Zhou (BUPT, China)
- 1570628936:** Adaptive Modulation and Coding Technology in 5G System; Yue Wang and Wei Liu (Chongqing University of Posts and Telecommunications, China); Linqun Fang (Yunnan Innovation Institute, BUAA, China)
- 1570617730:** An Advanced Design of MAC Layer for Smart Metering in Internet of Things; Ziyang Zhang (Chongqing University of Posts and Telecommunications, China); Xianzhi Lu (Chongqing College of Electronic Engineering, China)
- 1570633235:** Data Transmission Scheme Based on AES and Polar Codes; Dongliang Xiao, Zhenzhen Gu, Chao Yang and



Na Sun (China Agricultural University, China)

**1570623192:** Design of relay station antenna suitable for tunnel; Gang Peng, Jinjun Tian and Zhaozhao Wang (Chongqing Cewei Technology Co. Ltd., China)

**1570629956:** A Pre-restructured Learning-ISTA Deep Network for Millimeter Wave Antenna Array Diagnosis; Wei Wang, Yongfeng Ma, Siqi Ma, Jianguo Li and Xiangming Li (Beijing Institute of Technology, China)

**1570629261:** Performance Analysis of FM Dipole Antenna and Array; Qinlu Liu and Yan Zhang (Beihang University, China); Wei Xiao (Beijing BBEF Science & Technology Co., Ltd, China); Jinlin Yang, Da Sun, Tao Hong, Shanwei Lv and Jialin Zhang (Beihang University, China)

**Break — (15:30 - 16:00)**

**Monday Afternoon Sessions (MA) — (16:00 - 18:00)**

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| <ul style="list-style-type: none"><li>➤ <b>Session Title:</b> Smart Blockchain/Security (Intelligent Network Computing Workshop)</li><li>➤ <b>Session Chair:</b> Shaoyong Guo, <a href="mailto:syguo@bupt.edu.cn">syguo@bupt.edu.cn</a> (BUPT, China)</li><li><b>Link:</b> <a href="https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=m750247488b29e273b4236ae96b3f920a">https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=m750247488b29e273b4236ae96b3f920a</a></li><li><b>Meeting number:</b> 165 128 7245, <b>Password:</b> EKuhqw87Yi2, <b>Host key:</b> 209853</li></ul> | <b>MA-6: Room: 1</b> |
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**1570624738:** Blockchain-based Data Security Management Mechanism for Power Terminals, Zhicai Huang and Huiqing Zhu (Dongguan Power Supply Bureau of Guangdong Power Grid Co., Ltd, China)

**1570624769:** Power Mobile Terminal Identity Authentication Mechanism Based on Blockchain, Heping Huang and Xiaoqun Chen (Dongguan Power Supply Bureau of Guangdong Power Grid Co., Ltd, China)

**1570628485:** Reform of Network Security Technology Practice Teaching System Based on Virtual Simulation Training Platform, Ping Xia (Guangzhou College of Technology and Business, China)

**1570629418:** Transmission Guarantee Method of End-to-end Service In Narrowband Dynamic Environment, Yahui Ding and Peng Yu (BUPT, China); Jianli Guo and Xiujuan Shi; Yi Zhang (the 54th Research Institute of China Electronics Technology Group Corporation, China)

**1570630074:** Continuous Authentication of Mouse Dynamics Based on Decision Level Fusion, Lifang Gao and Yangyang Lian; Huifeng Yang; Rui Xin (State Grid Hubei, China); Zhouzhi Yu, Wenwei Chen and Yukun Zhu (Beijing Fibrlink Communications, China); Siya Xu; ShaoYong Guo; Yanjin Cheng (BUPT, China)

**1570630080:** Multi-dimensional Identity Authentication Mechanism for Power Maintenance Personnel based on Blockchain, Dang Fangfang, Gao Feng, Liang Huichao and Sun You (State Grid Henan Electric Power Company, China)

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| <ul style="list-style-type: none"><li>➤ <b>Session Title:</b> 5G and Beyond Networks and Services (Wireless Nets Symp.)</li><li>➤ <b>Session Chair:</b> Nidal Nasser, <a href="mailto:nnidal@gmail.com">nnidal@gmail.com</a>, Alfaisal University, KSA</li><li><b>Meeting Link:</b> <a href="https://us02web.zoom.us/j/82570958759?pwd=dJp6bHVLYTY2bWtPbHlGeUFiUIBmQT09">https://us02web.zoom.us/j/82570958759?pwd=dJp6bHVLYTY2bWtPbHlGeUFiUIBmQT09</a></li><li><b>Meeting ID:</b> 825 7095 8759, <b>Password:</b> 7j1YQA</li></ul> | <b>MA-7: Room: 2</b> |
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**1570630104:** Interference Reducing and Resource Allocation in UAV-Powered Wireless Communication System, Weidang Lu, Peiyuan Si and Hong Peng (Zhejiang University of Technology, China); Su Hu (University of Electronic Science and Technology of China, China); Gao Yuan (Tsinghua University, China)

**1570620904:** A Dynamic Cluster Head Selecting Algorithm for UAV Ad Hoc Networks, Liang Ye (Harbin Institute of Technology, China); Yue Li (Heilongjiang University, China); Shuai Han (Harbin Institute of Technology, China)

**1570630806:** URLLC and eMBB coexistence in unlicensed spectrum: a preemptive approach, Ayat Zaki-Hindi (Télécom SudParis & Orange Labs, France); Salah Eddine Elayoubi (CentraleSupélec, FR); Tijani Chahed (Telecom SudParis, France)

**1570633478:** Toward a Highway Traffic Flow Monitoring System Based on Mobile Phone Signaling Data, Fei Ding (Nanjing UPT, China); Guifa Hao (Zhenjiang Highway, China); Yuchen Sha (Nanjing UPT, China); Cong Li (Zhenjiang Highway, China); Jinghui Xia (Nanjing UPT, China); Nianqi Zhang; Yong Yin (China Mobile Group Jiangsu Co., Ltd., China)

**1570622117:** Resource Allocation for Mobile Edge Computing System Based on PDT Network, Chenguang He, Jingqi Yang, Shouming Wei and Liang Ye (Harbin Institute of Technology, China)

**1570633281:** Cloud-RAN functional split for an efficient fronthaul network, Veronica Quintana Rodriguez, Fabrice M. Guillemin and Alexandre Ferrieux (Orange Labs, France); Laurent Thomas (Open Cells, France)

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| <ul style="list-style-type: none"><li>➤ <b>Session Title:</b> Satellite Networks (Satellite Symposium)</li><li>➤ <b>Session Chair:</b> Chunxiao Jiang, <a href="mailto:jchx@tsinghua.edu.cn">jchx@tsinghua.edu.cn</a>, Tsinghua University, China</li><li><b>Link:</b> <a href="https://meetingsapac26.webex.com/meetingsapac26/j.php?MTID=m76734b44c64a22e36a644e17010ef7bb">https://meetingsapac26.webex.com/meetingsapac26/j.php?MTID=m76734b44c64a22e36a644e17010ef7bb</a></li><li><b>Meeting ID:</b> 166 431 8349, <b>Password:</b> 2CvEpc7zUv2 (22837279 from video systems)</li></ul> | <b>MA-8: Room: 3</b> |
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**1570627147:** Capacity Analysis of Multi-layer Satellite Networks, Xiangming Zhu (Zhejiang Lab, China); Chunxiao Jiang (Tsinghua University, Beijing, China); Linling Kuang (Tsinghua University, China); Mianxiong Dong (Muroran Institute of Technology, Japan); Zhifeng Zhao (Zhejiang Lab, China)

**1570630495:** Shipping Lane-Aware Caching and Transmission Scheme for Maritime Wireless Networks, Chuanao Jiang; Yuzhou Fu; Chunxiao Jiang; Liuguo Yin (Tsinghua University, China)

**1570630661:** A Cognitive Networking Technique for LTP Segmentation, Ricardo Lent (University of Houston, USA)

**1570631877:** Traffic Optimization in Satellites Communications: A Multi-agent Reinforcement Learning Approach, Zeyu Qin; Haipeng Yao; Tianle Mai (Beijing University of Posts and Telecommunications, China)

**1570631886:** Double Auction Game-based Computing Resource Allocation in LEO Satellite System, Yaqing Jin (Beijing University of Technology, China); Haipeng Yao; Tianle Mai (Beijing University of Posts and Telecommunications, China)

**1570633439:** Resource Allocation in Beam Hopping Communication Satellite System, Dingyuan Shi (Beihang University, China); Feng Liu (Beijing University of Aeronautics and Astronautics, China); Tao Zhang (Beihang University, China)

<p>➤ <b>Session Title:</b> Multimedia Information Processing (Multimedia Symposium) <b>MA-9: Room: 4</b></p> <p>➤ <b>Session Chair:</b> Liang Zhou, <a href="mailto:liang.zhou@njupt.edu.cn">liang.zhou@njupt.edu.cn</a> (Nanjing University of Posts and Telecom., China)</p> <p>➤ <b>Session Co-Chair:</b> Xin Wei, <a href="mailto:xwei@njupt.edu.cn">xwei@njupt.edu.cn</a>, Nanjing University of Posts &amp; Telecom., Nanjing, China</p> <p><b>Meeting Link:</b> <a href="https://www.webex.com/">https://www.webex.com/</a>, <b>Meeting Number:</b> 126 161 6478, <b>Password:</b> yCg6EpzpC87</p>
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**1570622069:** Video Compression Estimating Recognition Accuracy for Remote Site Object Detection, Yusuke Shinohara; Hayato Itsumi; Florian Beye; Takanori Iwai (NEC Corporation, Japan)

**1570629046:** DQ-RM: Deep Reinforcement Learning-based Route Mutation Scheme for Multimedia Services, Tao Zhang; Changqiao Xu; Bingchi Zhang (BUPT, China); Xiaohui Kuang (Institute of System and Engineering, Academy of Military Science, Beijing, China); Yue Wang; Shujie Yang (BUPT, China); Gabriel-Miro Muntean (Dublin City University, Ireland)

**1570636388:** A Priority-aware DASH-based Multi-View Video Streaming Scheme over Multiple Channels, Abid Yaqoob; Ting Bi; Gabriel-Miro Muntean (Dublin City University, Ireland)

**1570630067:** Proactive Information Dissemination in WebRTC-based Live Video Distribution, Ishani Sarkar; Guillaume Urvoy-Keller (Université Côte d'Azur, France); Soufiane Rouibia (EasyBroadcast, France); Dino Lopez Pacheco (Université Côte d'Azur, France)

**1570630537:** Accurate Prediction of Streaming Video Traffic in TCP/IP Networks using DPI and Deep Learning, Waqar Aziz; Hassaan Khaliq Qureshi (National University of Sciences and Technology, Pakistan); Adnan Iqbal (Namal College Mianwali, Pakistan); Marios Lestas (Frederick University, Cyprus)

**1570633533:** An Efficient Hadoop-Based Framework for Data Storage and Fault Recovering in Large-Scale Multimedia Sensor Networks, Hassan Harb (Antonine University, Lebanon); Ghina Saad (Lebanese University, Lebanon); Abdelhafid Abouaissa; Lhassane Idoumghar (University of Haute Alsace & IRIMAS Institute, France); Nour Charara (American University of Culture and Education (AUCE), Lebanon)

<p>➤ <b>Session Title:</b> PHY layer for IoT II (5G-IoT Symposium) <b>MA-10: Room: 5</b></p> <p>➤ <b>Session Chair:</b> Shuanli Wu, <a href="mailto:wushuangli@cnic.cn">wushuangli@cnic.cn</a> (Chinese Academy of Science, China)</p> <p><b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=maa81752c3e123f8931582341b7bc2d1c">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=maa81752c3e123f8931582341b7bc2d1c</a></p>
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**1570633256:** LDPC for receive antennas selection in massive MiMo; Djedjiga Benzid (ETS, Canada); Kadoch Michel (ETS University of Quebec, Canada); Zhengwei Chang (State Grid Sichuan Electric Power Company, China); Jizhao Lu (State Grid Henan Electric Power Company, China); Rong Ke Liu (Beihang University, China)

**1570622068:** An Improved Threshold Wavelet Denoising LS Channel Estimation Algorithm Based On IoT; HaoLin Wang (Chongqing University of Posts and Telecommunications, China); Fanqin Zhou and Peng Yu (Beijing University of Posts and Telecommunications, China); Shaohua Liu (National Defense Research Institute of Chongqing University of Posts and Telecommunications, China)

**1570629572:** Research on Chirp Signal Denoising Algorithm Based on IoT; Shaohua Liu (National Defense Research Institute of Chongqing University of Posts and Telecommunications, China); Peng Yu and Fanqin Zhou (BUPT, China); HaoLin Wang (Chongqing University of Posts and Telecommunications, China)

**1570629949:** Digital-Analog Hybrid Equalization of Broadband Signals Based on Equivalent Time Sampling; Xuhui Ding, Yongfeng Ma, Jiwen Wang, Wei Wang, Jianguo Li and Xiangming Li (Beijing Institute of Technology, China)

**1570626358:** Simulation and Analysis of the Impact of MIMO System on Communication Quality; Shi Wei (Economy and Informatization Commission of Jiangjin District, Chongqing, China)

**1570630258:** Lookup Service for Fog-based Indoor Localization Platforms using Chord Protocol, Amir Guidara; Ghofrane Fersi (National School of Engineers of Sfax, Tunisia); Faouzi Derbel (Leipzig University of Applied Sciences, Germany)

**TECHNICAL PROGRAM**  
**IEEE IWCMC 2020**  
**Limassol, Cyprus, June 15<sup>th</sup> — 19<sup>th</sup>, 2020**

**Tuesday, June 16<sup>th</sup>, 2020**

**KEYNOTE 1 — (9:00 - 10:00)**

**Room: 1**

- **Speaker:** Prof. Raouf Boutaba,
  - **Title:** Self-driving Networks: Challenges and Opportunities
  - **Chairs:** Azzam Mourad, [azzam.mourad@lau.edu.lb](mailto:azzam.mourad@lau.edu.lb), Lebanese American University, Lebanon
- Meeting Time:** <https://lau.webex.com/lau/j.php?MTID=m15cde559bd5e2420cefa76ee055354d2>  
**Meeting number:** 163 499 1314, **Password:** VWxD35Sep8n

**Break — (10:00 - 10:30)**

**Tuesday Morning Sessions (TM) — (10:30 12:30)**

- **Session Title:** INVITED PAPERS **TM-1: Room: 1**
  - **Session Chair:** Sofiene Affes, [affes@emt.inrs.ca](mailto:affes@emt.inrs.ca) (INRS-EMT, University of Quebec, Canada)
- Meeting Link:** <https://INRS.zoom.us/j/98522040815?pwd=WTB6RUxOY1k2eWI2TWIDdDR3U25oZz09>

**1570635921:** Coverage Analysis of UAVs in Millimeter Wave Networks: A Stochastic Geometry Approach, Matilde Boschiero and Marco Giordani (University of Padova, Italy); Michele Polese (Northeastern University, USA); Michele Zorzi (University of Padova, Italy)

**1570645572:** Connectivity-Based Joint Parameter Estimation in One-Dimensional Wireless Sensor Networks, Nour Zaarour (Université du Québec-INRS, Canada); Sofiene Affes (INRS-EMT, Canada); Nahi Kandil; Nadir Hakem (Université du Québec en Abitibi Témiscamingue & LRTC Research Laboratory Télébec in Underground Communications, Canada)

**1570629413:** A Non-Stationary VVLC MIMO Channel Model for Street Corner Scenarios, Qingshan Chen (Shandong University, China); Cheng-Xiang Wang (Southeast University & Heriot-Watt University, China); Jian Sun; Wensheng Zhang (Shandong University, China); Qiuming Zhu (Nanjing University of Aeronautics and Astronautics, China)

**1570630822:** Multimodal and Multi-pass Authentication Mechanisms for Electric Vehicle Charging Network, Binod Vaidya and Hussein Mouftah (University of Ottawa, Canada)

**1570622066:** Adaptive Access Control Policies for IoT Deployments, Ashraf Alkhrshesh (Queen's University, Canada); Khalid Elgazzar (Ontario Tech University, Canada); Hossam S. Hassanein (Queen's University, Canada)

- **Session Title:** Intelligent Wireless Communications (Intelligent Network Computing Work.) **TM-2: Room: 2**
  - **Session Chair:** Fei Zheng, [zhengfei@guet.edu.cn](mailto:zhengfei@guet.edu.cn) (Guilin University of Electronic Technology, China)
- Link:** <https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=m4e0d8c99790675122c35c0f1c94cf49f>  
**Meeting number:** 165 223 1892, **Password:** e34pQJNP3js, **Host key:** 753548

**1570621719:** Optimization on Cooperative Communications Based on Network Coding in Multi-hop Wireless Networks, Xiande Bu; Chuan Liu (Global Energy Interconnection Research Institute co., Ltd, China); Qiang Yu (Southeast University, China); Lei Yin and Feng Tian (Nanjing University of Posts and Telecommunications, China)

**1570627558:** Deep Reinforcement Learning based Green Resource Allocation Mechanism in Edge Computing driven Power Internet of Things, Mo Yang, Peng Yu and Ying Wang (BUPT, China); Xiuli Huang (Global Energy Interconnection Research Institute co. Ltd., China); Weiwei Miu (State Grid Jiangsu Electric Power Co., Ltd, China); Pengfei Yu (Global Energy Interconnection Research Institute Co., Ltd, China); Wei Li (State Grid Jiangsu Electric Power Company Information & Telecommunication Branch, China); Ruxia Yang (Global Energy Interconnection Research Institute Co., Ltd, China); Minxing Tao (BUPT, China); Lei Shi (Carlow Institute of Technology, Ireland)

**1570628456:** Energy Saving Algorithm of Wireless Network Nodes in Cluster, Zihong Zhang, Rui Luo and Wei Fu (HongHe University, China)



**1570628489:** Research on 5G Wireless Network Deployment in Tourist Cities, Hao Chen, Yong Mo and Quanzhi Qian (Chongqing University of Posts and Telecommunications, China); Ping Xia (Guangzhou College of Technology and Business, China)

**1570628496:** Cluster-Based Routing Algorithm for WSN Based on Subtractive Clustering, Ling Chen, Wenwen Liu, Daofu Gong and Yan Chen (State Key Laboratory of Mathematical Engineering and Advanced Computing, China)

**1570628498:** Clustering and Routing Optimization Algorithm for Heterogeneous Wireless Sensor Networks, Ling Chen, Wenwen Liu, Daofu Gong and Yan Chen (State Key Laboratory of Mathematical Engineering and Advanced Computing, China)

➤ <b>Session Title:</b> Network Security (Security Symposium)	<b>TM-3: Room: 3</b>
➤ <b>Session Chair:</b> Sghaier Guizani, <a href="mailto:gguizani@gmail.com">gguizani@gmail.com</a> (Alfaisal University, KSA)	
<b>Meeting Link:</b> <a href="https://us02web.zoom.us/j/8514280719?pwd=dmlQWEFDR1F3NjJUNjdL1BCYzRxQT09">https://us02web.zoom.us/j/8514280719?pwd=dmlQWEFDR1F3NjJUNjdL1BCYzRxQT09</a>	
<b>Meeting ID:</b> 851 428 0719, <b>Password:</b> 495345	

**1570622350:** SVCF: Secure Vehicular Cloud Framework, Soukeina Zouaidi (HANA Research Laboratory, University of Manouba, Tunisia); Abdelfettah Belghith (King Saud University, Saudi Arabia); Ilhem Lengliz (Military Academy, Tunisia)

**1570630776:** Fuzzing attacks for vulnerability discovery within MQTT protocol, Rafik Zitouni; Gautier Casteur; Auriane Aubaret; Valentin Clouet; Benjamin Blondeau; Valentin Pical; Adrien Quemat (ECE Paris, France)

**1570633214:** Investigating the Filter Capacity of Linecouplers in KNX regarding network security, Johannes Goltz (University of Rostock, Germany)

**1570633502:** Enforcing Risk-Awareness in Access Control Systems: Synthesis, Discussion and Guidelines, Pierrette Annie Evina (University of Carthage, Tunisia); Faouzi Jaidi; Faten Labbene Ayachi; Adel Bouhoula (Higher School of Communications of Tunis, Tunisia)

**1570633554:** Active, Reactive and Proactive Visibility-Based Cyber Defense For Defending Against Attacks On Critical Systems, Yosra Lakhdhar; Slim Rekhis (University of Carthage, Tunisia)

**1570635107:** Comparative Study of Classification Algorithms for Cloud IDS using NSL-KDD Dataset in WEKA, Saida Farhat (NTS'COM, ENET'COM, Tunisia); Manel Abdelkader (University of Tunis & Tunis Business School, Tunisia); Amel Meddeb-Makhlouf; Faouzi Zarai (Sfax University, Tunisia)

➤ <b>Session Title:</b> Security and Privacy (WSNs Symposium)	<b>TM-4: Room: 4</b>
➤ <b>Session Chair:</b> Jalal Almhana, <a href="mailto:jalal.almhana@umoncton.ca">jalal.almhana@umoncton.ca</a> (University of Moncton, Canada)	
<b>Meeting Link:</b> <a href="https://meetingsamer22.webex.com/meet/pr1267636509">https://meetingsamer22.webex.com/meet/pr1267636509</a>	

**1570622213:** Identifying DDoS Attacks from Fluctuations in Wireless Traffic in an Intelligent IoT Road Network, Evangelos Spyrou, Konstantinos Skoufas and Dimitri Mitrakos (Aristotle University of Thessaloniki, Greece)

**1570633661:** A Secure, Energy-Efficient and Distributed Manageable Model for a Smart Home, Ioannis Kounatidis (International Hellenic University & University Of Nicosia, Greece); Constandinos X. Mavromoustakis (University of Nicosia & University of Nicosia Research Foundation, Cyprus); Periklis Chatzimisios (International Hellenic University, Greece); George Mastorakis (Hellenic Mediterranean University, Greece); Jordi Mongay Batalla (Warsaw University of Technology & National Institute of Telecommunications, Poland)

**1570622316:** LGMal: A Joint Framework Based on Local and Global Features for Malware Detection, Yuhan Chai, Jing Qiu and Shen Su (Guangzhou University, China); Chunsheng Zhu (Southern University of Science and Technology, China); Lihua Yin and Zhihong Tian (Guangzhou University, China)

**1570622416:** An Online Anomaly Detection Approach For Unmanned Aerial Vehicles, Chafiq Titouna (Paris Descartes University, France); Farid Nait-Abdesselam (University of Missouri Kansas City, USA); Hassine Moun gla (University of Paris Descartes & Instiut Mines Telecom, France)

**1570632829:** A Lightweight And Secure Authentication Protocol for WSN, Himani Sikarwar and Debasis Das (IIT Jodhpur, Rajasthan, India)

**1570633455:** Security issues in Industry 4.0, Intissar Jamai (National School of Computer Science (ENSI), Tunisia)

➤ <b>Session Title:</b> Algorithms for IoT (5G-IoT Symposium)	<b>TM-5: Room: 5</b>
➤ <b>Session Chair:</b> Yunchuan Sun, <a href="mailto:yunch@bnu.edu.cn">yunch@bnu.edu.cn</a> , <a href="mailto:yunchsun@163.com">yunchsun@163.com</a> (Beijing Normal University, China)	
<b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m7045f4dd00fe952878702c5ba7baa4f0">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m7045f4dd00fe952878702c5ba7baa4f0</a>	

**1570624544:** Improvement of SINR for MIMO channels in terahertz communication; Xianzhi Lu (Chongqing College of Electronic Engineering, China); Mingming Lv (BeiHang University, China); Tao Hong (Yunnan Innovation Institute, BUAA Kunming, BeiHang University, China)

**1570621685:** A New Navigation Method for VR-based Telerobotic System via Supervisor's Real Walking in a Limited Physical Space; Wei Gai, Huiyu Li, Yanshuai Zhao, Maiwang Shi and Wenfei Wang (Shandong University, China); Yunchuan

Sun (Beijing Normal University, China); Chenglei Yang (Shandong University, China)

**1570629528:** Beam Tracking Based on unscented Kalman Filter Theory in Millimeter Wave Communication Systems for IoT; Gaolu Liu (Chongqing University of Posts and Telecommunications, China); Fanqin Zhou and Peng Yu (BUPT, China)  
**1570629443:** Recent Research on AI in Games; Boming Xia and Xiaozhen Ye (University of Science and Technology Beijing, China); Adnan Abuassba (Arab Open University, Palestine)  
**1570633433:** An Improved Fuzzy Algorithmic Approach Applying on Medical Image to Improve the Contrast; Min Wu (Guangdong Ocean University, China)

➤ <b>Session Title:</b> Broadcast in the Era of B5G (5G-EWNAT Workshop)	<b>TM-6: Room: 6</b>
➤ <b>Session Chair:</b> Richie Leo, <a href="mailto:richie.leo@zte.com.cn">richie.leo@zte.com.cn</a> , ZTE Corporation, China	
<b>Meeting Link :</b> Link: <a href="https://meetingsamer22.webex.com/meet/pr1269048798">https://meetingsamer22.webex.com/meet/pr1269048798</a> , <b>1269048798</b>	

**1570621422:** Research on OTFS Modulation Applied in LTE-based 5G Terrestrial Broadcast, Boyuan Xu; Zhiping Xia (Academy of Broadcasting Science, China); Runnan Liu (Shanghai Jiao Tong University, China); Yu Zhang; Jun Hu; Wei Xie (Academy of Broadcasting Science, Beijing, China)  
**1570621632:** Comparative Study on KPIs between FeMBMS and DTMB, Zhiping Xia; Boyuan Xu; Xiangkun Meng; Yu Zhang (Academy of Broadcasting Science, China)  
**1570622433:** Research on Networking Technology of Digital Terrestrial Television Single Frequency Network, Ming Dai (Communication University of China & Academy of Broadcasting Planning, NRTA, China)  
**1570638288:** Novel Printed UWB Miniature Antenna for UHF TV and LTE/4G Devices, Mervat Madi and Karim Kabalan (American University of Beirut, Lebanon)  
**1570621988:** Signed Network Embedding with Dynamic Metric Learning, Huangang Wu and Donghai Guan (Nanjing University of Aeronautics and Astronautics, China); Guangjie Han (Hohai University, China); Weiwei Yuan (Nanjing University of Aeronautics and Astronautics, China)

**BREAK**

**12:30 – 13:30**

**Tuesday Afternoon Sessions (TA) — (13:30 - 15:30)**

➤ <b>Session Title:</b> Internet of Things and Network Security (Wireless Nets Symp.)	<b>TA-1: Room: 1</b>
➤ <b>Session Chair:</b> Muhammad Imran, <a href="mailto:cmimiran81@gmail.com">cmimiran81@gmail.com</a> , King Saud University, KSA	
<b>Meeting Link:</b> <a href="https://maeen.zoom.us/j/95288870585?pwd=SXYxOGxWbjhVVy9pZWpJMVkxV1Z2dz09">https://maeen.zoom.us/j/95288870585?pwd=SXYxOGxWbjhVVy9pZWpJMVkxV1Z2dz09</a>	
<b>Meeting ID:</b> 952 8887 0585, <b>Password:</b> 436736	

**1570633485:** Scalable and Cost Efficient Maximum Concurrent Flow over IoT using Reinforcement Learning, Abou-Bakr Djaker; Bouabdellah Kechar (University of Oran1, Algeria); Hatem Ibn-khedher (Télécom SudParis, Institut Telecom & Paris Saclay, France); Hassine Mounsla (University of Paris Descartes & Institut Mines Telecom, France); Hossam Affi (Télécom SudParis, Institut Telecom & Paris Saclay, France)  
**1570630172:** Load Optimization of Joint User Association and Dynamic TDD in Ultra Dense Networks, Shouming Wei; Ting Li; Wei Wu (Harbin Institute of Technology, China)  
**1570629439:** Reinforcement Learning Empowered QoS-aware Adaptive Q-Routing in Ad-hoc Networks, Jiacheng Du, Xiaoyan Huang, Fan Wu and Supeng Leng (University of Electronic Science and Technology of China, China)  
**1570633402:** On the Performance of Irregular Repetition Slotted Aloha with Multiple Packet Reception, Iman Hmedoush; Cedric Adjih and Paul Muhlethaler (INRIA, France); Vinod Kumar (WWRF, Switzerland)  
**1570633594:** IoT Device Type Identification Using Hybrid Deep Learning Approach for Increased IoT Security, Jiaqi Bao, Bechir Hamdaoui and Weng-Keen Wong (Oregon State University, USA)  
**1570610631:** A Secure Routing Protocol in Heterogeneous Networks for Internet of Things, Wassim Jerbi (National School of Engineering of Sfax, University of Sfax, Tunisia)

➤ <b>Session Title:</b> e-Health I (e-Health Symposium)	<b>TA-2: Room: 2</b>
➤ <b>Session Chair:</b> Aiman Erbad, <a href="mailto:airbad@ieee.org">airbad@ieee.org</a> (Qatar University, Qatar)	
<b>Meeting Link:</b> <a href="https://qu.webex.com/qu/j.php?MTID=m108432a0aadcd6b8dd60974575d75232">https://qu.webex.com/qu/j.php?MTID=m108432a0aadcd6b8dd60974575d75232</a>	
<b>Meeting ID:</b> 163 780 2062, <b>Password:</b> 1234	

**1570633540:** Smart Edge Healthcare Data Sharing System, Zina Chkirbene (Qatar University & Electrical Engineering, Qatar); Amr Mohamed, Aiman Erbad and Mohsen Guizani (Qatar University, Qatar)  
**1570624786:** Internet of Medical Things: Remote Diagnosis and Monitoring Application for Diabetics, Serigne Mbengue, Ousmane Diallo and EL Malick Hadji Ndoeye (University of Assane Seck of Ziguinchor, Senegal); Joel J. P. C. Rodrigues

(Federal University of Piauí (UFPI), Brazil & Instituto de Telecomunicações, Portugal); Augusto J. Venancio Neto (Federal University of Rio Grande do Norte (UFRN), Brazil & Instituto de Telecomunicações Aveiro, Portugal); Jalal Al-Muhtadi (King Saud University, Saudi Arabia)

**1570630126:** A heart rate extraction from the speech signal without a prior information about a speaker, Ekaterina Pakulova and Artem Ryndin (Southern Federal University, Russia); Oleg Basov (SPIIRAS, Russia); Dmitry Poleshenkov (ITMO University, Russia)

**1570630707:** Migrating Intelligence from Cloud to Ultra-Edge Smart IoT Sensor Based on Deep Learning: An Arrhythmia Monitoring Use-Case, Sadman Sakib (Lakehead University, Canada); Mostafa M. Fouda (Tennessee Tech University, USA & Benha University, Egypt); Zubair Md. Fadlullah (Computer Science, Lakehead University, Canada); Nidal Nasser (Alfaisal University, Saudi Arabia)

**1570633577:** Double Authentication Model based on PPG and ECG Signals, Lucas de Lima Bastos and Thais dos Santos (Federal University of Pará, Brazil); Denis Lima Rosário (Federal University of Para, Brazil); Eduardo Cerqueira (Federal University of Para & UCLA & UFPA & UCLA, Brazil); Aldri Santos and Michele Nogueira (Federal University of Parana (UFPR), Brazil)

**1570633991:** Improving Human Activity Recognition Algorithms using Wireless Body Sensors and SVM, Aymen Shaafi (Universite de Paris, France); Osman Salem and Ahmed Mehaoua (University of Paris Descartes, France)

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| <p>➤ <b>Session Title:</b> Signal Processing for Wireless Communications I (Comm. &amp; SP Symposium) <b>TA-3: Room: 3</b></p> <p>➤ <b>Session Chair:</b> Rodolfo Oliveira, <a href="mailto:rado@fct.unl.pt">rado@fct.unl.pt</a> (NOVA University of Lisbon, Portugal)</p> <p><b>Meeting Link:</b> <a href="https://meet.google.com/ryp-qfqq-bsr">https://meet.google.com/ryp-qfqq-bsr</a></p> |
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**1570621464:** Design and Implementation of Polyphase Fast Fourier Transform Channelizer, Ali J. Ghandour (National Council for Scientific Research, Lebanon); Ahmad Mansour (IUL, Lebanon); Hussein AlAsadi (Technische Universität München, Germany); Walid Ghandour (Lebanese University, Lebanon)

**1570622184:** Performance Analysis of Downlink OSTBC-OFDM and OSTBC-GFDM signals in the context of 5th Generation C-RAN, Khalil Aissaoui; Mhatli Sofien; Attia Rabah, Tunisia Polytechnic School, Tunisia

**1570630003:** VANET Clustering Based on Weighted Trusted Cluster Head Selection, Grace Khayat (University of Nicosia & Mobile Systems Laboratory, Cyprus); Constandinos X. Mavromoustakis (University of Nicosia & University of Nicosia Research Foundation, Cyprus); George Mastorakis (Hellenic Mediterranean University, Greece); Jordi Mongay Batalla (Warsaw University of Technology & National Institute of Telecommunications, Poland); Hoda Maalouf (Notre Dame University, Zouk Mosbeh, Lebanon); Evangelos Pallis (Technological Educational Institute of Crete, Greece)

**1570630453:** Noise-Resilient Blind Deconvolution using Error-Correcting Codes, Muhammad Farooq (University College Dublin, Ireland & UET Lahore, Pakistan); Ubaid Ullah Fayyaz (University of Engineering & Technology Lahore, Pakistan); Humera Hameed (Information Technology University Lahore, Pakistan)

**1570630802:** In-Band Full-duplex Residual Self-interference Approximation in Multi-tap Delay Fading Channels, Ayman T. Abusabah; Luis Irio; Rodolfo Oliveira, Universidade Nova de Lisboa, Portugal, Instituto de Telecomunicações, Portugal

**1570633560:** Analysis of Architectural solutions Impact on Energy Consumption: Graph-Based Analysis, Basma Khil (Faculty of Mathematical, Physical and Natural Sciences of Tunis, Tunisia); Adel Khalfallah (Higher Institute of Computer Science, Tunisia); Samir Ben Ahmed (Faculte des Sciences de Tunis, Tunisia)

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| <p>➤ <b>Session Title:</b> Smart Industry Applications I (Intelligent Network Computing Workshop) <b>TA-4: Room: 4</b></p> <p>➤ <b>Session Chair:</b> Tao Hong, <a href="mailto:hongtao@buaa.edu.cn">hongtao@buaa.edu.cn</a> (Beihang University, China)</p> <p><b>Link:</b> <a href="https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=md43019e2605012c3600373f911226c2a">https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=md43019e2605012c3600373f911226c2a</a></p> <p><b>Meeting number:</b> 165 836 6597, <b>Password:</b> pqH4Vf7JM5U, <b>Host key:</b> 364391</p> |
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**1570625777:** Bionic Robot Jellyfish Based on Multi-Link Mechanism, Bo Tang; Li Jiang; Rotian Li (Xi'an Technological University, China)

**1570625792:** Mobile Platform Type Lower Limb Rehabilitation Electromechanical System, Bo Tang (Xi'an Technological University, China); Li Jiang (Xi'an Medical University School, China); Xinxing Zhang, Rui Fu and Shan Yang (Xi'an Technological University, China)

**1570628399:** Temperature Measurement Algorithm based on Fiber Bragg Grating for Intelligent Electrical Equipment, Mingxin Qiu (Shandong Vocational College of Light Industry, China)

**1570628401:** Stability Analysis of Electronic Circuit based on Complex Neural Network Theory, Yandong Yu and Yuge Yao (Jining Normal University, China)

**1570628405:** Modeling and Simulation of Micro-Piezoelectric Energy Collector with Cantilever Beam, Jilan Yan (Shandong Vocational College of Light Industry, China)

**1570628440:** Optimal Path Planning for Robot Based on Ant Colony Algorithm, Hong Zhao (Shandong Vocational College of Light Industry, China)

➤ **Session Title:** UAV & Vehicular Networks (5G-IoT Symposium) **TA-5: Room:**  
➤ **Session Chair:** Jie Sheng, [jsheng@suda.edu.cn](mailto:jsheng@suda.edu.cn) (Soochow University, China)  
**Link:** <https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=mb9a3a9f70e5f835eb009ae746d8cc602>

**1570622445:** Uplink Performance Analysis of UAV Cellular Communications with Power Control; Xiuhua Fu and Tian Ding (Shandong University of Technology, China); Kadoch Michel (ETS University of Quebec, Canada); Mohamed Cheriet (Ecole de technologie supérieure (University of Quebec), Canada)

**1570632351:** Research on Emergency Coverage Capability of fixed Wing UAV Based on 5G; Shaowei Zhang (China Telecom Research Institute, China)

**1570632359:** A Downlink Coverage Scheme of Tethered Drones; Lei Liu (Beijing Research Institute of China Telecom, China)

**1570632527:** 3D Deployment of Multiple UAVs for Emergent On-Demand Offloading; Allafi Omran (University of Quebec & Ecole de Technologie Supérieure, Canada); Lokman Sboui; Kadoch Michel (ETS University of Quebec, Canada); Zhengwei Chang (State Grid Sichuan Electric Power Company, China); Jizhao Lu (State Grid Henan Electric Power Company, China); Rong Ke Liu (Beihang University, China)

**1570621228:** A Fast Processing Method for Railway Track Laser Stripes Based on Internet of Things; Peng Shuxue, Weimin Diao, Yang Xinxin and Wang Xuemei (Beihang University, China)

**1570633258:** Spectrum Management in High-Speed Railway Cooperative Cognitive Radio Network Based on Multi-agent Reinforcement Learning; Cheng Wang, Qingting Wu, Ziwen Tang, Jie Sheng, Cheng Wu, Yiming Wang (Soochow University, China)

**Break — (15:30 - 16:00)**

**Tuesday Afternoon Sessions (TA) — (16:00 - 18:00)**

➤ **Session Title:** Privacy & Security (Security Symposium) **TA-6: Room: 1**  
➤ **Session Chairs:** Amr Mohamed, [amrm@qu.edu.qa](mailto:amrm@qu.edu.qa) (Qatar University, Qatar)  
**Meeting Link:** <https://qu-edu.webex.com/meet/amrm>

**1570633543:** Iterative Per Group Feature Selection For Intrusion Detection, Zina Chkirbene; Aiman Erbad; Ridha Hamila; Amr Mohamed; Mohsen Guizani (QU, Qatar); Mounir Hamdi (Hamad Bin Khalifa University, Qatar)

**1570630572:** Investigation on Deep Learning Methods for Privacy and Security Challenges of Cognitive IoV, Mohamed Saifeddine Hadj Sassi (University of Sfax, Tunisia); Lamia Chaari (University of Computer Science and Multimedia of Sfax & Laboratory of Technologies for Smart Systems at Digital Research Center of Sfax (CRNS), Tunisia)

**1570633510:** RL-MADP: Reinforcement Learning-based Misdirection Attack Prevention Technique for WSN, Iqra Mustafa (Cork Institute of Technology (CIT), Ireland); Sheraz Aslam (Cyprus University of Technology, Cyprus); Muhammad Bilal Qureshi (Shaheed Zulfikar Ali Bhutto Institute S&T, Islamabad, Pakistan); Nouman Ashraf (TSSG, Waterford Institute of Technology, Ireland); Shahzad Aslam; Syed Mohsin; Hasnain Mustafa (COMSATS University Islamabad, Pakistan)

**1570633534:** Investigating The Darknet, Joanna Moubarak (Potech Labs & Saint Joseph University of Beirut, Lebanon); Carole Bassil; Rachid Bou Zeid (Lebanese University, Lebanon)

**1570633506:** Algorithm for Multi Keyword Search Over Encrypted Data in Cloud Environment, Debasis Das (IIT Jodhpur, Rajasthan, India); Ruhul Amin (DR SPM IIIT Naya Raipur, India); Sumit Kalra (IIT Jodhpur, India)

**1570630859:** A survey on blockchain based cyber security for vehicular networks, Xifeng Wang; Changqiao Xu; Zan Zhou; Shujie Yang (BUPT, China); Limin Sun (Institute of Information Engineering, China Academy of Science, Beijing, China)

➤ **Session Title:** e-Health I (e-Health Symposium) **TA-7: Room: 2**  
➤ **Session Chair:** Khalid Abulsaud, [k.abualsaud@qu.edu.qa](mailto:k.abualsaud@qu.edu.qa), Qatar University, Qatar  
**Meeting Link:** <https://qu-edu.webex.com/qu-edu/j.php?MTID=mfb6375bb21b0f0100a769e0a18196af0>  
**Meeting Number:** 121 393 6847, **Password:** 12345

**1570633567:** Compression Distortion-Rate Analysis of Biomedical Signals in Machine Learning Tasks in Biomedical Wireless Sensor Network Applications, Jose Santos, Michael Hempel and Hamid Sharif (Univ. of Nebraska-Lincoln, USA)

**1570629598:** UAV Placement Optimization for Internet of Medical Things, Chaogang Tang (CUMT, Xuzhou, Jiangsu, China); Chunsheng Zhu (Southern University of Science and Technology, China); Xianglin Wei (Nanjing Telecommunication Technology Research Institute, China); Joel J. P. C. Rodrigues (Federal University of Piau (UFPI), Brazil & Instituto de Telecomunicações, Portugal); Weijia Jia (University of Macau, Macao)

**1570634285:** Experimenting Long Range Wide Area Network in an e-Health Environment: Discussion and Future Directions, Nagib Matni (Federal University of Pará, Brazil); Jean Moraes (UFP, Brazil); Lucas Pacheco (UFGA, Brazil); Denis Lima Rosário; Helder May Nunes da Silva Oliveira; Eduardo Cerqueira (Federal University of Para & UCLA & UFGA & UCLA, Brazil); Augusto J. Venancio Neto (Federal University of Rio Grande do Norte (UFRN), Brazil & Instituto de



Telecomunicações Aveiro, Portugal)

**1570634331:** Auction-based Time Resource Allocation for Energy Harvesting WBAN, Nedia Badri; Leila Nasraoui; Leila Azouz Saidane (ENSI, University of Manouba, Tunisia); Nour Brinis (Cristal team - School of Computer Science (ENSI) - Tunisia & Hipercom team - INRIA Rocquencourt - Paris, Tunisia)

**1570635513:** IoT Anti-Jamming Strategy Using Game Theory and Neural Network, Ala Gouissem, Khalid Abualsaud, Elias Yaacoub, Tamer Khattab and Mohsen Guizani (Qatar University, Qatar)

**1570630280:** Heuristic Algorithm for Gateway Location Selection in Large Scale LoRa Networks, Krzysztof Grochla and Konrad Polys (Institute of Theoretical and Applied Informatics of PAS, Poland)

➤ <b>Session Title:</b> Intelligent Cloud/SDN/NFV (Intelligent Network Computing Workshop)	<b>TA-8: Room: 3</b>
➤ <b>Session Chair:</b> Ying Wang, <a href="mailto:wangy@bupt.edu.cn">wangy@bupt.edu.cn</a> (BUPT, China)	
<b>Link:</b> <a href="https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=m206031063b9e6ef79afb387732d0fafa">https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=m206031063b9e6ef79afb387732d0fafa</a>	
<b>Meeting number:</b> 165 982 4570, <b>Password:</b> N7aUBK6iHu5, <b>Host key:</b> 680147	

**1570630085:** SLA-driven Creditable and Negotiable Resource optimized Allocation Scheme in Cloud, Peng Yu (BUPT, China); Yong Yan (State Grid Zhejiang Electric Power Research Institute, China); Haotian Qiu, Ying Wang, Fanqin Zhou, Lei Feng, Li Wenjing and Qiu Xue-song (BUPT, China)

**1570630534:** VNF Dynamic Scaling and Deployment Algorithm Based on Traffic Prediction, Riming Tong and Siya Xu (BUPT, China); Bo Hu, Jinhong Zhao and Lei Jin (State Grid Liaoning Electric Power Supply Co. Ltd, China); ShaoYong Guo; Wenjing Li (BUPT, China)

**1570631231:** Dynamic Orchestration of Service Function Chain Based on Reinforcement Learning, Lin Geng and Junli Mao (The 54th Research Institute of CETC, China); Ke Chen and Naling Li (BUPT, China)

**1570631282:** Service Chain Mapping Algorithm Based on Reinforcement Learning, Wei Li (State Grid Jiangsu Electric Power Company Information & Telecommunication Branch, China); Haiyang Wu, Chunxia Jiang and Ping Jia (Communication Branch, State Grid Jiangsu Electric Power Co., Ltd, China); Naling Li (BUPT); Peng Lin (VECTINFO, China)

**1570632724:** Dynamically Split the Traffic in Software Defined Network Based on Deep Reinforcement Learning, Hengbin An (BUPT, China); Yutong Ji, Ning Zhang and Wei Hu (State Grid Jibei Information & Telecommunication Company, China); Peng Yu and Ying Wang (BUPT, China)

**1570635073:** A Load Balancing Mechanism for 5G Data Centers, Xin Cui (Shandong University of Technology, China); Qingke Meng (SDUT, China); Weihang Wang (SHNU, China)

**1570635105:** An Optimized Controller Placement Algorithm in 5G Based on SDN, Xin Cui and Xiaohui Gao (Shandong University of Technology, China); Yan Ma (BUPT, China)

➤ <b>Session Title:</b> Cooperative Communications and MIMO Systems (Wireless Nets Symp.)	<b>TA-9: Room: 4</b>
➤ <b>Session Chair:</b> Jalel Ben-Othman, <a href="mailto:jalebeno@yahoo.fr">jalebeno@yahoo.fr</a> , University of Paris 13, France	
<b>Meeting Link:</b> <a href="https://teams.microsoft.com/dl/launcher/launcher.html?url=%2f%20%23%2f%20team%2f19%3a1956252555614942b760e138ee%40thread.tacv2%2fconversations%3fgroupId%3d8fb07c13-64ef-4115-9e07-1be680c30db1%2ftenantId%3d61f3e3b8-9b52-433a-a4eb-c67334ce54d5&amp;type=team&amp;deeplinkId=9615cd4a-c0b4-4bf47-a878a11a78f2&amp;directDI=true&amp;msLaunch=true&amp;enableMobilePage=true&amp;suppressPrompt=true">https://teams.microsoft.com/dl/launcher/launcher.html?url=%2f%20%23%2f%20team%2f19%3a1956252555614942b760e138ee%40thread.tacv2%2fconversations%3fgroupId%3d8fb07c13-64ef-4115-9e07-1be680c30db1%2ftenantId%3d61f3e3b8-9b52-433a-a4eb-c67334ce54d5&amp;type=team&amp;deeplinkId=9615cd4a-c0b4-4bf47-a878a11a78f2&amp;directDI=true&amp;msLaunch=true&amp;enableMobilePage=true&amp;suppressPrompt=true</a>	

**1570629820:** New User Grouping Scheme for Better User Pairing in NOMA Systems, Salifou Mouchili; Soumaya Hamouda (SupCom, Tunisia)

**1570629855:** Energy Efficient Relay Selection Algorithm for Virtual MIMO Cooperative Networks, Mohamad S El Cheikh, Oluyomi Simpson and Yichuang Sun (University of Hertfordshire, UK)

**1570630265:** Performance Analysis of 64-QAM Proposed Modification in MIMO Transmit Diversity at LTE Network Cell Edges, Haitham Mohamed Hafez (Alexandria University, Egypt); Onsy Abdul Alim (Beirut Arab University & Alexandria University, Lebanon); Amr Mokhtar (Egypt, Egypt)

**1570632917:** Access Selection Algorithm Based on Traffic Distribution with Delay Optimization in Heterogeneous Wireless Networks, Gen Liang and Minyi Chen (Guangdong University of Petrochemical Technology, China)

**1570633209:** Issues of Decision-Making Information Systems: A Review, Aminata Kane (Computer Engineer, Senegal); Karim Konate (Senegal); Joel J. P. C. Rodrigues (UFPI), Brazil & Instituto de Telecomunicações, Portugal)

➤ <b>Session Title:</b> Routing Protocols (5G-IoT Symposium)	<b>TA-10: Room: 5</b>
➤ <b>Session Chair:</b> Hui Yang, <a href="mailto:yanghui@bupt.edu.cn">yanghui@bupt.edu.cn</a> (BUPT, China)	
<b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=mdad50f7c9e8e88f26d8d9f3fbabe013a">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=mdad50f7c9e8e88f26d8d9f3fbabe013a</a>	



**1570619694:** Virtual Force Traffic-aware Routing Protocol for Wireless Sensor Networks; Jiangyu Yan and Liangrui Tang (North China Electric Power University, China); Wei Ding (China Southern Power Grid Research Institute Guangzhou, China); Haobo Guo (North China Electric Power University, China)

**1570620236:** Routing and Resource Allocation Leveraging Self-organizing Feature Maps in Multi-core Optical Networks Against 5G and Beyond; Qiuyan Yao; Hui Yang and Boyuan Yan; Bowen Bao; Jie Zhang; Ao Yu (Beijing University of Posts and Telecommunications, China)

**1570621727:** Brain-like Development Based Multi-Routing Optimization for High Mobility in Optical Fronthaul; Rui Li; Hui Yang; Ao Yu and Bowen Bao; Qiuyan Yao; Jie Zhang (BUPT, China)

**1570622321:** Deep Reinforcement Learning based Time Synchronization Routing Optimization for C-RoFN in beyond 5G; Ao Yu (BUPT, China); Baoguo Yu (54th Reserarch Institute, China Electronics Technology Group, China); Hui Yang and Qiuyan Yao; Jie Zhang (BUPT, China); Mohamed Cheriet (Université du Québec, China)

**1570630176:** Co-Allocation of Service Routing in SDN-driven IP+Optical Smart Grid Communication Networks based on Deep Reinforcement Learning; Qingliu Ma; Xiong Ao; Peng Yu; ShaoYong Guo (BUPT, China); Ningzhe Xing (State Grid Corp. of China, China); Wenjing Li, Lei Feng and Qiu Xue-song (BUPT, China)

**1570622072:** Demonstration of Intent Defined Optical Network: Toward Artificial Intelligence-Based Optical Network Automation; Kaixuan Zhan; Hui Yang ((BUPT, China); Jun Li (504 Research Institutes China Aerospace Science and Technology Corporation, China); Xudong Zhao; Bohui Wang; Jie Zhang (BUPT, China)

**1570633323:** Anti-SEU design of SRAM based on FinFET process, Man Zhang; Lijun Zhang; Yi Ping Zhang (Soochow University, China)

**TECHNICAL PROGRAM**  
**IEEE IWCMC 2020**  
**Limassol, Cyprus, June 15<sup>th</sup> — 19<sup>th</sup>, 2020**

**Wednesday, June 17<sup>th</sup>, 2020**

**KEYNOTE 2 — (9:00 - 10:00)**

**Room: 1**

- **Speaker:** George K. Karagiannidis, Aristotle University of Thessaloniki, Greece
  - **Title:** Lightning up the wireless communications: Opportunities, challenges and misconceptions
  - **Chair:** Chadi Abou-Rjeily, [chadi.abourjeily@lau.edu.lb](mailto:chadi.abourjeily@lau.edu.lb), Lebanese American University, Lebanon
- Meeting Link:** <https://lau.webex.com/lau/j.php?MTID=mc46ac65d7ae0c980294f6027f23b69dc>

**Break — (10:00 - 10:30)**

**Wednesday Morning Sessions (WM) — (10:30 - 12:30)**

- **Session Title:** Smart Industry Applications II (Intelligent Network Computing Workshop) **WM-1: Room: 1**
  - **Session Chair:** Shuanli Wu, [wushuangli@cnic.cn](mailto:wushuangli@cnic.cn) (Chinese Academy of Science, China)
- Link:** <https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=med024e91c782a2695b8bb4b4d4dbbf49b>  
**Meeting number:** 165 947 6633, **Password:** rjAJtgUt567, **Host key:** 372217

**1570625785:** Analysis of the Application of Artificial Intelligence Technology in the Construction of Smart Campus, Weiyang Liang (Jiaying University, China)

**1570625796:** Development Trend and Thinking of Artificial Intelligence in Education, Weiyang Liang (Jiaying U., China)

**1570628407:** Improved Algorithm for Solving Trust Region Sub-problem Based on Adams Two-Step Algorithm, Jilan Yan (Shandong Vocational College of Light Industry, China)

**1570628434:** Visual Monitoring Algorithms for Real-time Change of Fitness Center Rate, Hong Zhao (Shandong Vocational College of Light Industry, China)

**1570628453:** Coupling Model Prediction of Fresh Grape Metamorphism in Cold Chain Transportation, Rui Luo, Zihong Zhang and Wei Xiong (HongHe University, China)

**1570632927:** Vehicular Network Edge Intelligent Management: A Deep Deterministic Policy Gradient Approach for Service Offloading Decision, Yinlin Ren (BUPT, China); Xiuming Yu (China Electronics Standardization Institute, China); Xingyu Chen; ShaoYong Guo; Qiu Xue-song (BUPT, China)

- **Session Title:** Multimedia Services (Multimedia Symposium) **WM-2: Room: 2**
  - **Session Chair:** Liang Zhou, [liang.zhou@njupt.edu.cn](mailto:liang.zhou@njupt.edu.cn), (Nanjing University of Posts and Telecom., China)
  - **Session Co-Chair:** Xin Wei, [xwei@njupt.edu.cn](mailto:xwei@njupt.edu.cn), Nanjing University of Posts & Telecom., Nanjing, China
- Meeting Link:** <https://www.webex.com/>, **Meeting Number:** 126 970 8385, **Password:** SPfWUu3E2H7

**1570621465:** Performance Study of Catmull-Clark Subdivision Surfaces Algorithm, Ali J. Ghandour (National Council for Scientific Research, Lebanon); Walid Ghandour; Hassan Diab; Ahmad Nasri (American University of Beirut, Lebanon)

**1570629426:** AVIRA: Enhanced Multipath for Content-aware Adaptive Virtual Reality, Fabio Silva; Mohammed Amine Togo; Gabriel-Miro Muntean (Dublin City University, Ireland)

**1570630676:** A Novel EEG Based Directed Transfer Function for Investigating Human Perception to Audio Noise, Bingrui Geng; Ke Liu; Yiping Duan; Qiwei Song; Xiaoming Tao; Jianhua Lu (Tsinghua University, China); Jincheng Shi (China Mobile Online Services Co., Ltd., China)

**1570633043:** Direct Propagation of network QoS distribution to subjective QoE for Video on Demand applications using VP9 codec, Abdul Wahab (Queen Mary University of London, UK); Nafi Ahmad; John Schormans (Queen Mary, University of London, UK)

**1570634654:** Performance Evaluation of a Multi-User Virtual Reality Platform, Venkatakrishnan Parthasarathy; Anderson Augusto Simiscuka; Noel E O'Conn; Gabriel-Miro Muntean (Dublin City University, Ireland)

**1570621302:** Deep-broad Learning System for Traffic Flow Prediction toward 5G Cellular Wireless Network, Mingzi Chen; Xin Wei; Yun Gao; Liqi Huang; Mingkai Chen; Bin Kang (Nanjing University of Posts and Telecommunications, China)

- **Session Title:** Deep Learning in WSN (WSNs Symposium) **WM-3: Room: 3**
- **Session Chair:** Hassine Moun gla, [hmoun gla@gmail.com](mailto:hmoun gla@gmail.com), (U. of Paris Descartes&Instiut Mines Telecom, FR)
- **Link:** <https://u-paris.zoom.us/j/94985202123?pwd=R3FGK0RxMzFCWnFjUkZMT1V6aFJmZz09>

**ID de réunion :** 949 8520 2123

**Mot de passe :** 537086

**1570633400:** Scalable and Cost Efficient Resource Allocation Algorithms Using Deep Reinforcement Learning, Mohammed Laroui (Paris Descartes University, France); Moussa Ali cherif (University of SBA, Algeria); Hatem Ibn Khedher (Centrale Supelec, France); Hassine Moun gla (University of Paris Descartes & Instiut Mines Telecom, France); Hossam Afifi (Télécom SudParis, Institut Telecom & Paris Saclay, France)

**1570630717:** Analytical study of frame aggregation level to infer IEEE 802.11 network load, Nour el hou da Bouzouita (ENS de Lyon, France); Anthony Busson (Université Claude Bernard Lyon 1 & Laboratoire de l'Informatique du Parallélisme, France); Herve Rivano (Inria & Université de Lyon, INRIA, INSA Lyon, CITI, France)

**1570631303:** Deep Reinforcement Learning for Real-Time Trajectory Planning in UAV Networks, Kai Li (CISTER Research Unit, Portugal); Wei Ni (CSIRO, Australia); Eduardo Tovar (ISEP-IPP, Portugal)

**1570633424:** Tailored Deep Learning based Architecture for Smart Agriculture, Jihene Ben Abderrazak (Assistant at ESPRIT, Tunisia); Hichem Besbes; Louay Boukhris (ESPRIT, Tunisia)

**1570634306:** Service Oriented D2D Efficient Communication for Post-Disaster Management, Sami Abdellatif; Okba Tibermacine (Biskra University, Algeria); Walid Bechkit (Univ Lyon, INSA Lyon, Inria, CITI, France); Abdelmalik Bachir (Biskra University, Algeria)

**1570630113:** An Adaptive Adjustment Algorithm of the Parameters in Alarm Association Rule Mining, Xiaodan Shi, Yang Yang, Xingyu Chen, Zhipeng Gao and Peng Yu (Beijing University of Posts and Telecommunications, China)

- **Session Title:** Satellite Transmission and Resource Allocation (Satellite Symposium) **WM-4: Room: 4**
- **Session Chairs:** Chunxiao Jiang, [jchx@tsinghua.edu.cn](mailto:jchx@tsinghua.edu.cn) Tsinghua University, China
- Link:** <https://meetingsamer23.webex.com/meetingsamer23/j.php?MTID=m892d68bf1723e6616b1c0b67cccbd821>
- Meeting ID:** 126 050 7345, **Password:** c7P2RVmt4r2 (27727868 from video systems)

**1570620597:** Flexible and Aggregated Mobility Management in Integrated Satellite-Terrestrial Networks, WenYing Dai; Hewu Li; Qian Wu (Tsinghua University, China); Xiaomo Wang (China Academy of Electronics and IT, China)

**1570622317:** Satellite Multicast Transmission Scheme for Integrated Satellite-Maritime Networks, Yuzhou Fu; Chuanao Jiang; Liuguo Yin (Tsinghua University, China)

**1570629229:** Distributed Power Control Based on Constrained MPC in Cognitive Satellite Terrestrial Networks, Shuying Zhang; Zuyao Ni; Chunxiao Jiang; Linling Kuang (Tsinghua University, China); Zhu Han (University of Houston, USA); Xiaohui Zhao (Jilin University & College of Communication Engineering, China)

**1570633312:** Reduced Complexity Iterative Multi-user Detector for IDMA-based Satellite Communication System, Senlin Li (Sun Yat-sen University, China); Yun Liu (The 54th Research Institute of China Electronics Technology Group Corporation, China); Xiang Chen; Jie Gong (Sun Yat-sen University, China); LiJun Zhai (Application and Technology on Aerospace Information Laboratory CETC, China)

**1570619615:** The Feasibility of Coexistence between IMT-2020 and Inter-Satellite Service in 26GHz band, Liyuan Zhong; Dong Zhou; Ruiqi Liu; Xinhui Wang; Xi Meng (ZTE Corporation, China)

**1570633987:** Performance analysis of M-QAM OFDM for satellite laser communication systems; Xueguang Yuan and Yuying Sun (BUPT, China); Lei Yang (China Transport Telecommunications & Information Center, China); Yangan Zhang and Mengting Qu (BUPT, China)

- **Session Title:** Resource Allocation and Scheduling (5G-IoT Symposium) **WM-5: Room: 5**
- **Session Chairs:** Zhaoyuan Shi, [shizy123@126.com](mailto:shizy123@126.com), [d180201013@stu.cqupt.edu.cn](mailto:d180201013@stu.cqupt.edu.cn) (CUPT, China)
- Link:** <https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m136a4a3626fa9885829bde8ffe68c78a>

**1570622118:** Resource Regulation Strategy Based on Resource Allocation Benefit state Transition in 5G Fronthaul; Yiqian Liu; Hui Yang; Ao Yu; Qiuyan Yao; Bowen Bao; Jie Zhang (BUPT, China)

**1570628737:** A Spectrum Resource Sharing Algorithm for IoT Networks Based on Reinforcement Learning; Zhaoyuan Shi and Xie Xian-Zhong (Chongqing University of Posts and Telecommunications, China); Kadoch Michel; Mohamed Cheriet (University of Quebec, Canada)

**1570629458:** Co-operative Admission Control and Optimum Power Allocation underlying 5G-IoTs Network aided D2D-

Satellite Communication; Asfand Yar Awan; Qi Zhao; Hu Shan (Beihang University, Beijing, China)

**1570630555:** Outage Probability of CDF-Based Scheduling for Uplink NOMA with Practical SIC Considerations; Huabing Lu; Xie Xian-Zhong and Zhaoyuan Shi (Chongqing University of Posts and Telecommunications, China); Kadoch Michel; Mohamed Cheriet (University of Quebec, Canada); Jun Cai (Concordia University, Canada)

**1570631871:** CoopeRA: Cooperator Resource Allocation Algorithm based On Clustering and D2D Transmissions in LTE Heterogeneous Networks and 5G networks; Chafika Tata (École de Technologie Supérieure, Canada & University of Algiers<sup>1</sup>, Algeria); Kadoch Michel (ETS University of Quebec, Canada); Zhengwei Chang (State Grid Sichuan Electric Power Company, China); Jizhao Lu (State Grid Henan Electric Power Company, China); Rong Ke Liu (Beihang University, China)

**1570622056:** Throughput-oriented Power Allocation Scheme Based on Convex Optimization for Cache-enabled FiWi Access Network in 5G IoT Scenario; Lin Guan and Hui Yang; Bowen Bao and Ao Yu (BUPT, China); Jun Li (504 Research Institutes China Aerospace Science and Technology Corporation, China); Mohamed Cheriet (Université du Québec, China)

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|---|
| ➤ <b>Session Title:</b> Physical Layer Advancements (5G-EWNAT Workshop) <b>WM-6: Room: 6</b>  |
| ➤ <b>Session Chair:</b> Yu Zhang, <a href="mailto:zhangyu@abs.ac.cn">zhangyu@abs.ac.cn</a> , Chinese Academy of Broadcasting Science                      |
| <b>Meeting Link:</b> <a href="https://meeting.tencent.com/s/vKVYI3bOjYCM">https://meeting.tencent.com/s/vKVYI3bOjYCM</a> , <b>Meeting ID:</b> 160 689 766 |

**1570618755:** Performance Evaluation of 5G Ultra-Reliable and Low Latency Communications, Peng Hao; Xianghui Han; Shuqiang Xia; Min Ren; Yiwei Deng (ZTE Corporation, China)

**1570630193:** Configured Grant Based URLLC Enhancement for Uplink Transmissions, Chunli Liang; Shuqiang Xia; Xianghui Han; Peng Hao (ZTE Corporation, China)

**1570629337:** Soft HARQ for 5G Downlink, Chulong Liang; Jin Xu; Qiuji Guo; Jun Xu (ZTE Corporation, China)

**1570629327:** Parallel Concatenation Codes with Polar Component Codes for IR-HARQ Functionality, FoCai Peng; Jin Xu; Mengzhu Chen; Li Tian (ZTE Corporation, China)

**1570629307:** LDPC design for 5G NR URLLC & mMTC, Liguang Li; Jun Xu; Jin Xu; Liujun Hu (ZTE Corporation, China)

**1570621024:** A Hybrid TSLM and A-Law Companding Scheme for PAPR Reduction in FBMC-OQAM Systems, Xiao Li; Dongfei Wang; Zheng Li; Wei Bai; Xiao Hu; Rui Fu (Academy of Broadcasting Science, China)

**BREAK**

**12:30 – 13:30**

**Wednesday Afternoon Sessions (WA) — (13:30 - 15:30)**

- |  |
|--|
| ➤ <b>Session Title:</b> Physical Layer Design (Wireless Nets Symp.) <b>WA-1: Room: 1</b>   |
| ➤ <b>Session Chair:</b> Mourad Azzam, <a href="mailto:azzam.mourad@lau.edu.lb">azzam.mourad@lau.edu.lb</a> , Lebanese American University, Lebanon                               |
| <b>Meeting Link:</b> <a href="https://lau.webex.com/lau/j.php?MTID=mc4e289af529334c38adcd200f34e3fd6">https://lau.webex.com/lau/j.php?MTID=mc4e289af529334c38adcd200f34e3fd6</a> |
| <b>Meeting number:</b> 163 525 0446, <b>Password:</b> DcFD7iiHt23  |

**1570622305:** Cross-term suppression of multi-component signals based on improved STFT-Wigner, Qian Qian Zhu, Yue Li, Hong Chang He and Gang Huang (Heilongjiang University, China)

**1570633529:** Multiband L-Shaped Slot Antenna Loaded with Split Ring Resonator, Nabil Dakhli; Fethi Choubani (Innov'Com Laboratory, SUPCOM, University of Carthage, Tunisia)

**1570622290:** Color Space and Multi-stream Spatial Modulation based Indoor Visible Light Communication, Meng Guo, Zhiquan Bai and Ke Pang (Shandong University, China); Hao Xinhong (Beijing Institute of Technology, China); Jie Tian (Shandong Normal University, China); Kyung Sup Kwak (Inha University, Korea (South))

**1570630605:** Design and Analysis of Color Shift Keying Modulation based Cooperative SM VLC System, Meng Guo, Zhiquan Bai and Ke Pang (Shandong University, China); Hao Xinhong (Beijing Institute of Technology, China); Jie Tian (Shandong Normal University, China); Kyung Sup Kwak (Inha University, Korea (South))

**1570620978:** A Max-log-MPA algorithm based on serial and threshold in SCMA system, Guanghua Zhang, Zonglin Gu, Jianpeng Zhang, Shihai Li and Jingqiu Ren (Northeast Petroleum U., China); Weidang Lu (Zhejiang U. of Technology, China)

**1570620632:** Aparecium Wi-Fi Planner using Enhanced Indoor Propagation Model, Ali J. Ghandour (National Council for Scientific Research, Lebanon); Jamal Haydar (Islamic University of Lebanon, Lebanon); Ali Hariri (University of Trento, Lebanon); Jad Chahine (Islamic University of Lebanon, Lebanon)

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| ➤ <b>Session Title:</b> Signal Processing for Wireless Communications II (Com. & SP Symposium) <b>WA-2: Room: 2</b>                  |
| ➤ <b>Session Chair:</b> Rodolfo Oliveira, <a href="mailto:rado@fct.unl.pt">rado@fct.unl.pt</a> (NOVA University of Lisbon, Portugal) |
| <b>Meeting Link:</b> <a href="https://meet.google.com/kxk-amzw-tqj">https://meet.google.com/kxk-amzw-tqj</a>                         |

**1570633458:** Joint SDMA and Power-Domain NOMA System for Multi-User Mm-Wave Communications, Israa Khaled (IMT



Atlantique, France); Charlotte Langlais (IMT Atlantique Bretagne Pays de la Loire & Lab-STICC, France); Ammar El Falou (Lebanese University); Michel Jezequel (IMT Atlantique, France); Bachar ElHassan (Lebanese University, Faculty of Engineering, Branch1 & order of Engineers and Architects - Tripoli, Lebanon)

**1570633598:** Transmit Diversity for FSO/RF-Based Multiuser Networks, Imene Trigui (University of Toronto, Canada); Sofiene Affes (INRS-EMT, Canada); Anas M. Salhab (King Fahd University of Petroleum & Minerals, Saudi Arabia); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)

**1570634377:** Joint Relay and Jammer Selection based on Deep Learning for Improving the Physical Layer Secrecy in Cooperative Networks, Hefdh Allah Sakran (Stuttgart University, Germany)

**1570630788:** Residual Self-Interference Estimation in In-Band Full-Duplex Wireless Systems, Luis Irio (Instituto de Telecomunicações, Portugal); Ayman T. Abusabah (Universidade Nova de Lisboa, Portugal); Rodolfo Oliveira (Nova University of Lisbon, Instituto de Telecomunicações, Portugal)

**1570633289:** Labeling-Based Recipient Identification for BICM-ID in 64-QAM case, Maciej Krasicki (Poznan University of Technology, Poland)

**1570618812:** The Design of FIR Filter Based on Improved DA and Implementation to High-Speed Ground Penetrating Radar System, Jixi Li, Xu Bai and Shuai Han (Harbin Institute of Technology, China); Yue Yu (China Academy of Information and Communications Technology, China)

➤ <b>Session Title:</b> Optimization in Wireless Networks (WSNs Symp.)	<b>WA-3: Room: 3</b>
➤ <b>Session Chair:</b> Chadi Abou-Rjeily, <a href="mailto:chadi.abourjeily@lau.edu.lb">chadi.abourjeily@lau.edu.lb</a> , LAU, Lebanon	
<b>Meeting Link:</b> <a href="https://lau.webex.com/lau/j.php?MTID=mf56f73e94ef6308381d233006f2f45ef">https://lau.webex.com/lau/j.php?MTID=mf56f73e94ef6308381d233006f2f45ef</a>	

**1570633459:** Optimal Consensus Time Synchronizations for Wireless Sensor Networks, Abderrazek Abdaoui; Hasan Tariq, Farid Touati, Tarek M. Elfouly and Mohammad Al-Hitmi (Qatar University, Qatar); Mohamed Hossam Ahmed (Memorial University, Canada)

**1570630505:** Low-Cost Underwater Localization System, Baptiste Gerondeau, Louis-Félix Galeota and Antoine Caudwell; Roman Gouge; Alexis Martin; Raphaël Seguin; Rafik Zitouni (ECE Paris, France)

**1570625486:** Optimal Harvesting Duration For Two Way Relaying, Ghassan R. Alnwaimi (King Abdulaziz University, Saudi Arabia); Hatem Boujemaa (SupCom, Tunisia)

**1570622127:** Optimal Power Allocation for Cooperative DS-CDMA systems, Ghassan R. Alnwaimi (King Abdulaziz University, Saudi Arabia); Hatem Boujemaa (SupCom, Tunisia)

**1570631263:** Latency and Energy Transmission Cost Optimization Using BCO-aware Energy Routing for Smart Grid, Sara Hebal (University of Ferhat abbas Setif 1, Algeria); Saad Harous (UAE University, United Arab Emirates); Djamila Mechta (Université Ferhat ABBAS de Sétif, Algeria)

**1570633468:** Wireless Sensor Networks Life Time Optimization Based on the Improved Firefly Algorithm, Miodrag Zivkovic, Nebojsa Bacanin, Eva Tuba, Ivana Strumberger, Timea Bezdán and Milan Tuba (Singidunum University, Serbia)

➤ <b>Session Title:</b> Smart Platform/Software (Intelligent Network Computing Workshop)	<b>WA-4: Room: 4</b>
➤ <b>Session Chair:</b> Feng Lei, <a href="mailto:fenglei@bupt.edu.cn">fenglei@bupt.edu.cn</a> (Beijing University of Posts and Telecommunications, China)	
<b>Link:</b> <a href="https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=m541c8f22ec728d5b4b2f540a6ea356bf">https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=m541c8f22ec728d5b4b2f540a6ea356bf</a>	
<b>Meeting number:</b> 165 768 8250, <b>Password:</b> JiQzkCM8N33, <b>Host key:</b> 146957	

**1570628420:** Application of Computer Digital Simulation Technology in the Research of Martial arts Action Structure Image, Qingbao Wang (Baicheng Normal University, China)

**1570628445:** Self-Service Analysis Tools Based on Open Sharing, Ran Ran, Dapeng Zhou, Jun Bo, Pan Hu, Jun Qi, Qiang Gao and Junwei Sun (State Grid Liaoning Electric Power Co. Ltd., China)

**1570628448:** Instant Messaging Tool Task Collaboration Platform, Dapeng Zhou, Ran Ran, Xing Huang, Jun Bo, Zhuanguan Yang and Hao Wang (State Grid Liaoning Electric Power Co. Ltd., China)

**1570628492:** Modeling and Computer Simulation Analysis of Bearing-Gear System, Li Chang (Shandong Vocational College of Light Industry Shandong, Zibo, China)

**1570628493:** Simulation Analysis of Finite Element Preprocessing based on HyperMesh, Li Chang (Shandong Vocational College of Light Industry Shandong, Zibo, China)

**1570628500:** Research on the Construction of the Dynamical Mechanism Model for the Military Civilian Integration Sharing of College Educational Resources of Hubei Province, Chao Xie (Wuhan Donghu University, China); Yulin Luo (Wenhua College, China); Xiangjun Yu (Hubei Business College, China)

➤ <b>Session Title:</b> Performance Optimization and Analysis (5G-IoT Symposium)	<b>WA-5: Room: 5</b>
➤ <b>Session Chair:</b> Kadoch Michel, <a href="mailto:michel.kadoch@etsmtl.ca">michel.kadoch@etsmtl.ca</a> (ETS University of Quebec, Canada)	



**1570621717:** Capsule network-based traffic prediction for resources deployment in B5G fronthaul network; Zhen Xu; Hui Yang; Ao Yu; Qiuyan Yao; Bowen Bao; Jie Zhang (BUPT, China)

**1570630178:** A Parameter Optimization Method for LTE-R Handover Based on Reinforcement Learning; Xingqiang Cai, Cheng Wu, Jie Sheng, Jin Zhang and Yiming Wang (Soochow University, China)

**1570633087:** Mobility Load Balancing with Handover Minimization for 5G Small Cell Networks; Khaled Addali; Kadoch Michel (ETS University of Quebec, Canada); Zhengwei Chang (State Grid Sichuan Electric Power Company, China); Jizhao Lu (State Grid Henan Electric Power Company, China); Rong Ke Liu (Beihang University, China)

**1570631092:** Outage Performance in Cooperative IoT Networks with Energy Harvesting; Nouha Dahi (National Engineering School of Tunis, Tunisia); Noureddine Hamdi (SYSCOM ENIT, Tunisia)

**1570630757:** Performance Analysis of Mobile IoT Networks over Composite Fading Channels; Osamah S. Badarneh and Mustafa Shawaqfeh (German Jordanian University, Jordan); Kadoch Michel (ETS University of Quebec, Canada)

**1570635214:** Sum-Throughput Maximisation in Multi-Antenna aided Full-Duplex WPCNs with Self-Interference; Yali Zheng and Jie Hu (University of Electronic Science and Technology of China, China); Kun Yang (University of Essex, UK)

**Break — (15:30 - 16:00)**

**Wednesday Afternoon Sessions (WA) — (16:00 - 18:00)**

- |  |                      |
|--|----------------------|
| ➤ <b>Session Title:</b> Security in Vehicular Networks (Vehicular Symp.)   | <b>WA-6: Room: 1</b> |
| ➤ <b>Session Chair:</b> Muhammad Imran, <a href="mailto:cmimran81@gmail.com">cmimran81@gmail.com</a> , KSU, KSA  |                      |
| <b>Meeting Link:</b> <a href="https://maeen.zoom.us/j/96101461525?pwd=RHExc0trdWN5cEpGMUdvY2hjdGhiZz09">https://maeen.zoom.us/j/96101461525?pwd=RHExc0trdWN5cEpGMUdvY2hjdGhiZz09</a> |                      |
| <b>Meeting ID:</b> 961 0146 1525, <b>Password:</b> 777316  |                      |

**1570630782:** Trust-based NOMA for Resource Allocation in vehicular communications, Hanan Idriss (Lebanese International University, Lebanon); Hend Marouane; Amel Meddeb-Makhlouf; Ahmed Fakhfakh (ENETCOM, Sfax University, Tunisia); Abdel Mehsen Ahmad; Zouhair El-Bazzal; Hussein Hijazi (Lebanese International University (LIU, Lebanon)

**1570633372:** A Model-Based and Resource-Aware Testing Framework for Parking System Payment using Blockchain, Rateb Jabbar (Qatar University, Qatar); Moez Krichen (Enis, Sfax, Tunisia); Mohammed Shinoy; Mohamed Kharbeche; Noora H Fetais (Qatar University, Qatar); Kamel Barkaoui (Cedric Cnam- Paris, France)

**1570630490:** A Framework for Secure Vehicular Network using Advanced Blockchain, Vinay Chamola (BITS-Pilani, India); Vikas Hassija (Jaypee Institute of Information Technology Noida, India); Vatsal Gupta (Jaypee Institute of Information Technology, India); Sai Sessa Chalapathi G (Birla Institute of Technology and Science, India)

**1570633102:** An Efficient Lightweight Authentication and Batch Verification Scheme for Universal Internet of Vehicles (UloV) , Himani Sikarwar (IIT Jodhpur, Rajasthan, India); Debasis Das (IIT Jodhpur, Rajasthan, India)

**1570630096:** Edge Network Resource Synergy for Mobile Blockchain in Smart City, ShaoYong Guo; Yuanyuan Qi; Peng Yu; Sujie Shao; Qiu Xue-song (Beijing University of Posts and Telecommunications, China)

**1570630582:** Cyber-Physical Risk Driven Routing Planning with Deep Reinforcement-Learning in Smart Grid Communication Networks, Zhuojun Jin and Peng Yu; ShaoYong Guo; Lei Feng, Fanqin Zhou, Minxing Tao, Li Wenjing and Qiu Xue-song (Beijing University of Posts and Telecommunications, China); Lei Shi (Carlow Institute of Technology, Ireland)

**1570634264:** Security attacks impact for collective perception based roadside assistance: A study of a highway on-ramp merging case, Mohamed Hadded; Pierre Merdrignac (VEDECOM, France); Sacha Duhamel (Sumitomo Electric Industries, France); Oyunchimeg Shagdar (VEDECOM, France)

- |   |                      |
|---|----------------------|
| ➤ <b>Session Title:</b> IoT Advances (IoT Symposium)  | <b>WA-7: Room: 2</b> |
| ➤ <b>Session Chair:</b> Shun-Ren Yang, <a href="mailto:sryang@cs.nthu.edu.tw">sryang@cs.nthu.edu.tw</a> (National Tsing Hua U.), Phone Lin, (Nat'l Taiwan U.) |                      |
| <b>Meeting Link:</b> <a href="https://meet.google.com/ovk-uzhp-dpi">meet.google.com/ovk-uzhp-dpi</a>  |                      |

**1570621826:** Dictionary-Based DPCM Method for Compressing IoT Big Data, Ali Kadhum M. Al-Qurabat; Ali Kadhum Idrees (University of Babylon, Iraq); Chady Abou Jaoude (Antonine University & TICKET Lab, Lebanon)

**1570622370:** IoT-based Low Cost Architecture for Smart Farming, Amine Faïd; Mohamed Sadik; Essaid Sabir (ENSEM, Hassan II University of Casablanca, Morocco)

**1570622454:** Leveraging Digital Twins to Enhance Performance of IoT in Disadvantaged Networks, James Taylor, Jr.; Hamid Sharif (University of Nebraska-Lincoln, USA)

**1570628648:** Towards Energy and Resource Efficient Design for Scalable mMTC with A Distributed Energy-Restricted Cluster Based Transmission Scheme, Huamin Chen, Jiaxin Liu, Shaofu Lin and Haoru Su (Beijing University of Technology, China); Jingming Zhu and Limin Chen (Beijing National Speed Skating Oval Operation Co., Ltd, China)

**1570629942:** An IoT-oriented Cloud Platform for Intelligent Management of Emergency Equipment, Bo Ma (Sany Heavy Industry, China); Tian Wang (Huaqiao University, China); Liming Lin and Xirong Lv (Xiamen Great Power Geo-Information Technology Co., Ltd, China); Ying Ma (Xiamen University of Technology, China)

**1570630161:** Decision Tree and Support Vector Machine for Anomaly Detection in Water Distribution Networks, Jalal Dziri (National Engineering School of Tunis, Tunisia); Tahar Ezzedine (Tunis El Manar University, Tunisia)

**1570622287:** A research-oriented low-cost air pollution monitoring IoT platform, Yassine Ben-Aboud; Mounir Ghogho (International University of Rabat, Morocco); Abdellatif Kobbane (ENSIAS, Mohammed V University of Rabat, Morocco)

➤ <b>Session Title:</b> Emerging Topics in Wireless Networks (Wireless Nets Symp.)	<b>WA-8: Room: 3</b>
➤ <b>Session Chair:</b> Marco Giordani, <a href="mailto:giordani@dei.unipd.it">giordani@dei.unipd.it</a> , University of Padova, Italy	
<b>MEETING LINK:</b> <a href="https://unipd.zoom.us/j/94292833086?pwd=eVhHQkVMNk1CRXJNbTVPeDE4RXZYrdz09">https://unipd.zoom.us/j/94292833086?pwd=eVhHQkVMNk1CRXJNbTVPeDE4RXZYrdz09</a>	
<b>Meeting ID:</b> 942 9283 3086, <b>Password:</b> iwcmc-wa8	

**1570622224:** Uplink/Downlink Decoupled Access with Dynamic TDD in 5G HetNets, Bachir Lahad; Marc Ibrahim; Samer Lahoud (ESIB, Saint-Joseph University of Beirut, Lebanon); Kinda Khawam (Université de Versailles, France); Steven Martin (Paris-Sud University, France)

**1570619442:** LAMCO: A Layered Approach to Mobile Application Computation Offloading, Yousef Ballan (University of Liverpool, UK); Ali Ahmed (Victoria University of Wellington, New Zealand); Nilufar Baghaei (New Zealand)

**1570620213:** Design of Frequency Reconfigurable Triband Dipole Antenna Using Capacitive Loading, Saber Dakhli; Moheddine Smari (University of Carthage, Tunisia); Jean-marie Floch (IETR-INSA Rennes, France); F. Choubani (SUP'COM, Tunisia)

**1570630679:** Implementation of Reed Solomon Encoder on Low-Latency Embedded FPGA in Flexible SoC based on ARM Processor, Hajer Saidi (University of Sfax, Tunisia); Mariem Turki (UPMC, France); Zied Marrakchi (Mentor Graphics, Tunisia); Abdulfattah M. Obeid (King Abdulaziz City for Science and Technology (KACST), Saudi Arabia); Mohamed Abid (CES-ENIS, Tunisia)

**1570630728:** Low crosstalk and small size 12-channel WDM demultiplexer based on 2D photonic crystal, Radhoene Massoudi and Monia Najjar (Syscom, Tunisia); Nikhil Deep Gupta (Visvesvaraya National Institute of Technology, Nagpur, India); Vijay Janyani (Malaviya National Institute of Technology - MNIT, India)

**1570632790:** Novel design superelliptic photonic crystal ring resonator based on channel drop filter, Radhoene Massoudi and Monia Najjar (Syscom, Tunisia); Vijay Janyani (Malaviya National Institute of Technology - MNIT, India)

➤ <b>Session Title:</b> Smart Text/Image/Video processing (Intelligent Network Computing Workshop)	<b>WA-9: Room: 4</b>
➤ <b>Session Chair:</b> Lei Shi, <a href="mailto:Lei.Shi@itcarlow.ie">Lei.Shi@itcarlow.ie</a> (Institute of Technology Carlow, Ireland)	
➤ <b>Meeting Link:</b> <a href="https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=m51cc68c948f10a664d4777ce1a5375b2">https://universityofmelbourne-djf.my.webex.com/universityofmelbourne-djf.my/j.php?MTID=m51cc68c948f10a664d4777ce1a5375b2</a>	
<b>Meeting number:</b> 165 577 4574 <b>Password:</b> YjaJsmcj362 (95257625 from phones and video systems)	
Host key: 211426	

**1570621386:** News keywords extraction algorithm based on TextRank and classified TF-IDF, Xiong Ao (Xin Yu, Derong Liu and Hongkang Tian (Beijing University of Posts and Telecommunications, China)

**1570628403:** Application of Keyword Dynamic Query Software in Relational Database based on Big Data, Yandong Yu and Yuge Yao (Jining Normal University, China)

**1570628428:** Three-Dimensional Image Analysis of the Movement Characteristics of Nunchakus Kick Technique, Qingbao Wang (Baicheng Normal University, China)

**1570629153:** Relation Extraction with BERT-based Pre-trained Model, Haitao Yu, Yang Yang and Peng Yu (BUPT, China)

**1570629526:** KSF-ST: Video Captioning Based on Key Semantic Frames Extraction and Spatio-Temporal Attention Mechanism, Zhaowei Qu, Luhan Zhang and Xiaoru Wang (BUPT, China); Fu Li (Portland State University, USA); Bingyu Cao and Yueli Li (BUPT, China)

**1570630149:** Partial Occlusion Face Recognition Method Based on Acupoints locating through Infrared Thermal Imaging, Yangyang Lian, Zhihui Wang, Hanqing Yuan and Lifang Gao (STATE GRID HEBEI, China); Zhuozhi Yu and Wenwei Chen (Beijing Fibrlink Communications, China); Yifei Xing, Siya Xu and Lei Feng (BUPT, China)

➤ <b>Session Title:</b> Theory & Applications (5G-IoT)	<b>WA-10: Room: 5</b>
➤ <b>Session Chair:</b> Peng Yu, <a href="mailto:yupeng@bupt.edu.cn">yupeng@bupt.edu.cn</a> (BUPT, China)	
<b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m45f281bb4c90e0436ff6912ba08f7c43">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m45f281bb4c90e0436ff6912ba08f7c43</a>	

**1570633332:** Overview of Network Outage Detection Technology in 5G; Yun Han (Guangdong Ocean University, China); Yun Zhong (Haidong Middle School Pranch of Zhanjiang, China); Hongliang Wang (INSPUR, China)

**1570628520**: An Energy-efficient Frame-based Task Scheduling Algorithm for Heterogeneous Multi-core SoC in IoT Devices; Yi Yang (Chongqing University of Posts and Telecommunications, China); Weimin Diao (Beihang University, China)

**1570633321**: The base station System based on bidirectional LSTM model; Xuesong Kuang (Guangdong Ocean University, China); Hongliang Wang (INSPUR & None, China)

**1570628429**: Comparison of Acceptance in Mobile Smart Wearable Technology between SEM and DEMATEL Methods; Liao Hung-Yi (Shanghai Normal University, China); Chen Jih-Kuang (Zhaoqing University, China)

**1570633376**: Ensembled Tricks for Instance Segmentation; Runze Zhang (INSPUR & NONE, China); Liang Jin, Yongfang Chen, Zhenhua Guo, Kun Zhao and Yaqian Zhao (INSPUR, China)

**1570628012**: Back Analysis of Concrete Temperature Field and Simulation of Temperature Control Measures Based on Simulated Annealing Algorithm; Xuxiang Ta; Feng Nan and Huadong Sun (Shandong Jiaotong University, China)

**1570636104**: Tunable C and L Bands Demultiplexer Based on Photonic Crystal Ring Resonator, Radhoene Massoudi and Monia Najjar (Syscom, Tunisia); Vijay Janyani (Malaviya National Institute of Technology - MNIT, India)

**TECHNICAL PROGRAM**  
**IEEE IWCMC 2020**  
**Limassol, Cyprus, June 15<sup>th</sup> — 19<sup>th</sup>, 2020**

**Thursday, June 18<sup>th</sup>, 2020**

**KEYNOTE 3 — (9:00 - 10:00)**

**Room: 1**

- **Speaker:** Nidal Nasser, Alfaisal University University, KSA
- **Title:** Blockchain for IoT: Applications and Challenges
- **Chair:** Azzam Mourad, [azzam.mourad@lau.edu.lb](mailto:azzam.mourad@lau.edu.lb), LAU, Lebanon
- Meeting Link:** <https://lau.webex.com/lau/j.php?MTID=m1dcac91f8d5b6d265eb8ccd13206552d>
- Meeting number:** 163 571 8980, **Password:** Bmya7YQKp24

**Break — (10:00 - 10:30)**

**Thursday Morning Sessions (ThM) — (10:30 - 12:30)**

- **Session Title:** System Security (5G-IoT Symp.) **ThM-1: Room: 1**
- **Session Chair:** Yang Xinxin, [yangxx@buaa.edu.cn](mailto:yangxx@buaa.edu.cn) (Beihang University, China)
- Link:** <https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m17f151d0c177e01c852e0c905250c97f>

**1570628538:** Research on Feature Selection of Intrusion Detection Based on Deep Learning; Mingyuan Xin (Heihe University of China, China); Yong Wang (Heihe University, China)

**1570633576:** An Information Security Evaluation Model Supporting Measurement Model Adaptation; Jinxin Zuo, Ziyv Guo and Yueming Lu (Beijing University of Posts and Telecommunications, China)

**1570622221:** Spearman Correlation Coefficient Abnormal Behavior Monitoring Technology Based on RNN in 5G Network for Smart City; Chao Li and Hui Yang; Bowen Bao (BUPT, China); Huifeng Guo and Yong Jiang (ZTE, China); Jie Zhang (Beijing University of Posts and Telecommunications (BUPT), China)

**1570632953:** Research on High Performance 4G Wireless VPN for Smart Factory Based on Key Technologies of 5G Network Architecture; JIn Qibing and Guo Qing (Beijing University of Chemical Technology, China); Luo Mingshi (Xi'an Shiyu University, China)

**1570628997:** Research on Cloud Storage Verification Technology in Internet of Things Environment; Xiaoyin Yi and Jingyi Li (Chongqing University of Posts and Telecom, China); Gang Peng (Chongqing Cewei Technology Co. Ltd., China)

**1570628501:** Design and Implementation of Supply Chain Management System Based on ASP.NET, Xiangjun Yu (Hubei Business College, China); Qiongjie Zhou (Wuhan Donghu University, China)

- **Session Title:** Low Power Wide Area Networks Technologies for IoT (LPIoT Symposium) **ThM-2: Room: 2**
- **Session Chair:** Muhammad Mahtab Alam, [muhammad.alam@taltech.ee](mailto:muhammad.alam@taltech.ee), Tallinn Univ. of Technology, Estonia
- **Session Co-Chair:** Yannick Le Moullec, [yannick.lemoullec@taltech.ee](mailto:yannick.lemoullec@taltech.ee), Tallinn Univ. of Technology, Estonia
- Meeting Link:** <https://bit.ly/3dxxvUQ>

**1570621023:** Speech Interactive Emotion Recognition System Based on Random Forest, Susu Yan, Liang Ye and Shuai Han; Tian Han (Harbin University of Science and Technology, China); Yue Li (Heilongjiang University, China); Esko Alasaarela (University of Oulu, Finland)

**1570621208:** Dynamic Spectrum Allocation by 5G Base Station, Yizhe Zhang, Dazhi He and Wen He; Yin Xu; Guan Yun-feng; Wenjun Zhang (Shanghai Jiao Tong University, China)

**1570622312:** An Offloading Optimization Scheme for Multi-UAV Aided Network in Mobile Computing, Ang Gao and Qi Wang (Northwestern Polytechnical University, China); Yansu Hu (Chang'an University, China); Weijun Duan (The Northwestern Polytechnical University, China)

**1570629232:** Optical Spatial Modulation with Improved Energy Harvesting for MIMO FSO Communications, Chadi Abou-Rjeily; Azzam Mourad (Lebanese American University, Lebanon)

**1570629815:** Jointly optimized echo state network for short-term channel state information prediction of fading channel, Qiwu Luo; Jian Zhou (Central South University, China); Yichuang Sun & Oluyomi Simpson (University of Hertfordshire, UK)

**1570630736:** A Distributed Blockchain-based Broker for Efficient Resource Provisioning in 5G Networks, Mohammed Amine Togou and Ting Bi (Dublin City University, Ireland); Kapal Dev (Trinity College Dublin, Ireland); Kevin McDonnell and Aleksandar Milenovic (Huawei Technologies Co, Ireland); Hitesh Tewari (Trinity College Dublin, Ireland); Gabriel-Miro Muntean (Dublin City University, Ireland)

**1570633074:** Coverage Analysis of NB-IoT and Sigfox: Two Estonian University Campuses as a Case Study, Nishant Poddar (University of Tartu, Estonia); Sikandar Zulqarnain Khan (Tallinn University of Technology, Estonia); Jakob Mass and Satish N Srirama (University of Tartu, Estonia)

➤ <b>Session Title:</b> Data Networks (Big Data Symposium)	<b>ThM-3: Room: 3</b>
➤ <b>Session Chair:</b> Min Chen, <a href="mailto:minchen2012@hust.edu.cn">minchen2012@hust.edu.cn</a> , HUST, China	
➤ <b>Session Co-Chair:</b> Long Hu, <a href="mailto:hulong@hust.edu.cn">hulong@hust.edu.cn</a> , HUST, China	
<b>Meeting Link:</b> <a href="https://zoom.com.cn/j/5811776437?pwd=U0NidDBzVmRkbDd5MctNUW45REdIU09">https://zoom.com.cn/j/5811776437?pwd=U0NidDBzVmRkbDd5MctNUW45REdIU09</a>	
<b>Meeting ID:</b> 581 177 6437, <b>Password:</b> 2020	

**1570622182:** A Novel Image Classification Model Jointing Attention and ResNet for Scratch, Shuaifei Zhao (BUPT, China); Lichen Qiu (Dongyuqiao Primary School, China); Peng Qi and Yan Sun (BUPT, China)

**1570622203:** The Intelligent Diagnostic System for Common Diseases using the Optimized Medical Knowledge Graph, Jing Wang (AI Doctor Smart Healthcare Technology Ltd, China); Ning Liu (Chinese Academy of Sciences, China); Qian Hu; Zhichao Wu; Wan Dong; Yanan Shen (AI Doctor Smart Healthcare Technology Ltd, China)

**1570633375:** ICZP: An Independent Circular Zones Protocol for Heterogeneous Wireless Sensor Networks (HWSNs), Djamal Djabour (National Engineers School of Tunis, Tunisia); Wided Abidi (National Engineering School of Tunis (ENIT), Tunisia); Tahar Ezzedine (Tunis El Manar University, Tunisia)

**1570622183:** A Novel Code Stylometry-based Code Clone Detection Strategy, Wenyuan Dong; Hua Wei and Hong Luo (Beijing University of Posts and Telecommunications, China)

**1570635215:** Hybrid Multicast Beamforming and Combiner Design of mmWave based MIMO-SWIPT System, Qingdong Yue and Jie Hu (University of Electronic Science and Technology of China, China); Kun Yang (University of Essex, UK); Chuan Huang (The Chinese University of Hong Kong, Shenzhen, China)

**1570622198:** Adapting to User Interest Drifts for Recommendations in Scratch, Youhua Jiang (BUPT, China)

➤ <b>Session Title:</b> Smart and Reliable Vehicular Networks (Vehicular Symp.)	<b>ThM-4: Room: 4</b>
➤ <b>Session Chair:</b> Richie Leo, <a href="mailto:richie.leo@zte.com.cn">richie.leo@zte.com.cn</a> (ZTE, China)	
<b>Meeting Link:</b> <a href="https://meetingsamer22.webex.com/meet/pr1269048798">https://meetingsamer22.webex.com/meet/pr1269048798</a> , 1269048798	

**1570621904:** SmartFlow: An Adaptive Congestion Avoidance Protocol for Smart Transportation Systems, Zahid Khan (Prince Sultan University, Saudi Arabia); Anis Koubaa (Prince Sultan University, KSA)

**1570630554:** Edge Computing-based Fault-Tolerant Framework: A Case Study on Vehicular Networks, Asad Javed; Avleen Malhi; Kary Främling (Aalto University, Finland)

**1570622437:** Fusion Strategy of Multi-sensor Based Object Detection for Self-driving Vehicles, Yanqi Li; Jianwei Niu; Zhenchao Ouyang (Beihang University, China, China)

**1570621469:** A Vertical Handover Algorithm Based on Velocity Pre-decision and Fuzzy Logic for Heterogeneous Private Network, Chenguang He; Qiang Yang; Shuai Han; Shouming Wei (Harbin Institute of Technology, China)

**1570630855:** Detecting Dark Cars in Railroad Operations using Multi-Antenna Beamforming for Long-Distance Discovery and Identification of AEI Tags, Pejman Ghasemzadeh; Subharthi Banerjee; Michael Hempel; Herbert Harms; Hamid Sharif (University of Nebraska-Lincoln, USA)

**1570634305:** An Adaptive Multi-clustered Scheme for Autonomous UAV Swarms, Abderrahmane Lakas; Abdelkader Nasreddine Belkacem; Shamsa Al Hassani (UAE University, United Arab Emirates)

➤ <b>Session Title:</b> Machine Learning & Communications (5G-EWNAT Workshop)	<b>ThM-5: Room: 5</b>
➤ <b>Session Chairs:</b> Wei Chen, <a href="mailto:weich@bjtu.edu.cn">weich@bjtu.edu.cn</a> , Beijing Jiaotong University, China	
<b>Meeting Link:</b> Use VooV Meeting (腾讯会议): <a href="https://meeting.tencent.com/s/KjhRBYRaabWb">https://meeting.tencent.com/s/KjhRBYRaabWb</a>	
<b>Meeting ID:</b> 994 574 428	

**1570629168:** Machine Learning based Energy Saving Scheme in Wireless Access Networks, Yin Gao; Jiajun Chen; Zhuang Liu; Bo Zhang; Yazhu Ke; Ruiqi Liu (ZTE Corporation, China)

**1570632766:** An efficiency multi-scale method for single image super resolution, Dehui Kong; Ke Xu; Fang Zhu (ZTE Corporation, China); Zhu Tongtong; Liu Hengqi; Yang Wei; Song Jianjun (Sanechips, China)

**1570622189:** CNN based HDR/WCG Characteristic Detection for Ultra-High Definition Video, Yun Zhou; Xiao Hu; Xiaoqiang Guo; Xiaoyu Li; Xiao Li; Zhiping Xia (Academy of Broadcasting Science, China)



**1570635914:** Design and Implementation of Intelligent Audio Broadcast Monitoring System, Dingjing Zhang; Rui Fu; Tailong Niu; Lin Chang; Ying Wang; Ling Tuo (Academy of Broadcasting Science, NRTA, China)

**1570628427:** Construction of Big Data Monitoring Platform for Teaching Quality under Intelligent Education; Qin Fang, Li Lin, Zeng Weijia and Zhao Rong (Dalian University of Science and Technology, China))

**1570639655:** CNN and GRU based Deep Neural Network for Electricity Theft Detection to Secure Smart Grid, Ashraf Ullah; Nadeem Javaid; Omaji Samuel (COMSATS Institute of Information Technology, Pakistan); Muhammad Imran; Muhammad Shoab (King Saud University, Saudi Arabia)

**BREAK**

**12:30 – 13:30**

**Thursday Afternoon Sessions (ThA) — (13:30 - 15:30)**

- |   |                              |
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| <p>➤ <b>Session Title:</b> Decentralized system and Blockchain (5G-IoT Symposium)</p> <p>➤ <b>Session Chair:</b> Shaoyong Guo, <a href="mailto:syguo@bupt.edu.cn">syguo@bupt.edu.cn</a> (BUPT, China)</p> <p><b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=mcff22ef99f977d83b64e185ae12992af">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=mcff22ef99f977d83b64e185ae12992af</a></p> | <p><b>ThA-1: Room: 1</b></p> |
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**1570621730:** Blockchain-Based Bonus-Penalty Access Control Strategy For IoT Service In Cloud Radio Over Fiber Network; Jiaqi Yuan; Hui Yang; Yongshen Liang and Qiuyan Yao (BUPT, China); Libin Jiao (54th Reserach Institute, China Electronics Technology Group, China); Jie Zhang (BUPT, China)

**1570621739:** Demonstration of Blockchain-Based IoT Devices Anonymous Access Network using zero-knowledge proof; Jiaqi Yuan; Hui Yang, Shuai Dong and Qiuyan Yao (BUPT, China); Libin Jiao (54th Reserach Institute, China Electronics Technology Group, China); Jie Zhang (BUPT, China)

**1570622441:** Blockchain-based cross-domain authentication strategy for trusted access to mobile devices in the IoT; Shuai Dong, Hui Yang and Jiaqi Yuan (BUPT, China); Libin Jiao (54th Reserach Institute, China Electronics Technology Group, China); Ao Yu (BUPT, China); Jie Zhang (BUPT, China)

**1570633592:** A Decentralized Hierarchical Key Management Scheme for Grid-Organized Wireless Sensor Networks (DHKM); Samer Khasawneh; Kadoch Michel (ETS Univ. of Quebec, Canada); Zhengwei Chang (State Grid Sichuan Electric Power Company, China); Jizhao Lu (State Grid Henan Electric Power Company, China); Rong Ke Liu (Beihang U., China)

**1570630340:** Software-defined Cloud Manufacturing with Edge Computing for Industry 4.0; Chen Yang (Beijing Institute of Technology, China); Shulin Lan (University of Chinese Academy of Sciences, China); Weiming Shen (National Research Council Canada, Canada); Lihui Wang (KTH Royal Institute of Technology, Sweden); George Huang (The University of Hong Kong, Hong Kong)

**1570628914:** A Study of Network Security Situational Awareness in Internet of Things; Jingyi Li and Xiaoyin Yi (Chongqing UPT, China); Shi Wei (Economy and Informatization Commission of Jiangjin District, Chongqing, China)

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| <p>➤ <b>Session Title:</b> Internetworking Unmanned Ground and Aerial Systems (UAVs Workshop)</p> <p>➤ <b>Session Chair:</b> Anis Koubaa, <a href="mailto:akoubaa@psu.edu.sa">akoubaa@psu.edu.sa</a>, Prince Sultan University, Saudi Arabia</p> <p><b>Meeting Link:</b> <a href="https://us02web.zoom.us/j/86509963143?pwd=WVNGY09QRjFLV2pPZTVNak9uZGtBdz09">https://us02web.zoom.us/j/86509963143?pwd=WVNGY09QRjFLV2pPZTVNak9uZGtBdz09</a></p> <p><b>Meeting ID:</b> 865 0996 3143, <b>Password:</b> 855232</p> | <p><b>ThA-2: Room: 2</b></p> |
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**1570629097:** Towards Robust Onboard Control for Quadrotors via Ultra-Wideband-based Localization, Evagoras Makridis (KTH Royal Institute of Technology, Sweden); Themistoklis Charalambous (Aalto University, Finland)

**1570633663:** Energy-aware Collision Avoidance stochastic Optimizer for a UAVs set, Sihem Ouahouah (Aalto University, Finland); Jonathan Prados-Garzon, Tarik Taleb and Chafika Benzaid (Aalto University, Finland)

**1570634169:** UAV Communication Strategies in the Next Generation of Mobile Networks, Hamed Hellaoui (Aalto University, Finland); Ali Chelli (University of Agder, Norway); Miloud Bagaa; Tarik Taleb (Aalto University, Finland)

**1570631317:** Effects of Digital Map on the RT-based Channel Model for UAV mmWave Communications, Qiuming Zhu and Shan Jiang (Nanjing University of Aeronautics and Astronautics, China); Cheng-Xiang Wang (Southeast U. & Heriot-Watt U., China); Boyu Hua, Kai Mao, Xiaomin Chen and Weizhi Zhong (Nanjing University of Aeronautics and Astronautics, China)

**1570635021:** An Energy-Aware Joint Routing and Task Allocation Algorithm in MEC Systems Assisted by Multiple UAVs, Hui Xiao and Zhigang Hu (Central South University, China); Kun Yang (University of Essex, UK); Yao Du; Dongwei Chen (University of Electronic Science and Technology of China, Zhongshan Institute, China)

**1570622047:** Sliding-Window Based Batch Forwarding using Intra-Flow Random Linear Network Coding, Sen Ma (University of Chinese Academy of Sciences, China); Xiulian Liu (Astronaut Center of China, China); Yan Yan and Baoxian Zhang (University of Chinese Academy of Sciences, China); Jun Zheng (Southeast University, China)

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| <p>➤ <b>Session Title:</b> Smart Cities Symposium</p> <p>➤ <b>Session Chair:</b> Abdallah Khreishah, <a href="mailto:abdallah@njit.edu">abdallah@njit.edu</a>, NJIT, USA</p> <p>➤ <b>Session Co-Chair:</b> Ala Alfugaha, <a href="mailto:aalfugaha@hbku.edu.qa">aalfugaha@hbku.edu.qa</a>, HBKU, Qatar</p> | <p><b>ThA-3: Room: 3</b></p> |
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**Meeting Link:** <https://njit.webex.com/join/abdallah>

**1570635250:** Exploiting Unlabeled Data in Smart Cities using Federated Edge Learning, Abdullatif Albaseer; Bekir S Çiftler and Mohamed M. Abdallah; Ala Al-Fuqaha (Hamad Bin Khalifa University, Qatar)

**1570632840:** Securing Smart Grid Communication using Ethereum Smart Contracts, Raphaelle Akhras and Wassim El-Hajj (American University of Beirut, Lebanon); Michel Majdalani (McGill University, Canada); Hazem Hajj and Rabih Jabr (American University of Beirut, Lebanon); Khaled Bashir Shaban (Qatar University, Qatar)

**1570632797:** Vision-based Indoor Positioning Method By Joint Using 2D Images and 3D Point Cloud Map, Lin Ma and Han Jiang (Harbin Institute of Technology, China); Danyang Qin (Heilongjiang University, China); Xue-Zhi Tan (Harbin Institute of Technology, China)

**1570633547:** On the Social Network Centrality Principle for Human Centric Efficiency, Katerina Papanikolaou (European University Cyprus, Cyprus); Constandinos X. Mavromoustakis (University of Nicosia, Cyprus); George Mastorakis (Hellenic Mediterranean University, Greece); Jordi Mongay Batalla (Warsaw University of Technology, Poland); Ciprian Dobre (University Politehnica of Bucharest, Romania); Konstantinos Katzis (European University Cyprus, Cyprus)

**1570630520:** Mobility modeling through mobile data: generating an optimized and open dataset respecting privacy, Heber H. Arcolezi (Université Bourgogne Franche-Comté, France); Jean-François Couchot (University of Franche-Comté, France); Oumaya Baala (Université Bourgogne Franche-Comté, CNRS & UTBM, France); Jean-Michel Contet (Orange Business Services, France); Bechara Al Bouna (UA Lebanon, Lebanon); Xiaokui Xiao (National University of Singapore, Singapore)

**1570633500:** Machine Learning Application to Priority Scheduling in Smart Micro-Grids, Dridi Aicha (Telecom SudParis, France); Hassine Mounghla (University of Paris Descartes & Institut Mines Telecom, France); Hossam Afifi (Télécom SudParis, Institut Telecom & Paris Saclay, France); Jordi Badosa (Laboratoire de Météorologie Dynamique - Ecole Polytechnique, France); Florence Ossart (GEEPS - CentraleSupélec, France); Ahmed E. Kamal (Iowa State University, USA)

**1570621971:** Electric power quality disturbances classification based on temporal-spectral images and deep convolutional neural networks, Mohamed Aymane Ahajjam; Daniel Bonilla Licea; Mounir Ghogho (UIR, Morocco); Abdellatif Kobbane (ENSIAS, Mohammed V University of Rabat, Morocco)

➤ **Session Title:** Physical Layer Security (Security Symposium)

**ThA-4: Room: 4**

➤ **Session Chair:** Elias Yacoub, [elias.yaacoub@gmail.com](mailto:elias.yaacoub@gmail.com) (Qatar University, Qatar)

**MEETING LINK:** <https://qu.webex.com/qu/j.php?MTID=m67116ec938b798da359972dd767a91f4>

**Meeting number:** 163 359 3912, **Password:** KGgJpmMj624

**1570621846:** Friendly Jammer against an Adaptive Eavesdropper in a Relay-aided Network, Jishan Giti; Amin Sakzad; Balasubramaniam Srinivasan (Monash University, Australia); Joarder Kamruzzaman (Federation University Australia, Australia); Raj Gaire (Data61, CSIRO, Australia)

**1570622253:** Securing a power management chain for Smart Grids, Rim Aloulou; Amel Meddeb-Makhlouf (University of Sfax, Tunisia); Bilel Gassara (Centre de Recherche en Numérique de Sfax, Tunisia); Ahmed Fakhfakh (Digital Research Center of Sfax, Tunisia)

**1570622424:** Secure Performance Analysis for Full-Duplex Cooperative NOMA System in the Presence of Multiple Eavesdroppers, Nesrine Zaghdoud (SUP'COM, Tunisia); Adel Ben Mnaouer (Canadian University Dubai & Faculty of Engineering, UAE); Wided Hadjalouane (COSIM Research Lab, Tunisia); Hatem Boujemaa (SupCom, Tunisia); Farid Touati (Qatar University, Qatar)

**1570622446:** Secrecy Performance Analysis of Multi-Antenna NOMA System with AF/DF relaying under External and Internal Eavesdropping Scenarios, Nesrine Zaghdoud (SUP'COM, Tunisia); Adel Ben Mnaouer (Canadian University Dubai UAE); Wided Hadjalouane (COSIM Research Lab, Tunisia); Hatem Boujemaa (SupCom, Tunisia); Farid Touati (Qatar University, Qatar)

**1570631564:** Robust Statistics Evidence Based Secure Cooperative Spectrum Sensing for Cognitive Radio, Oluyomi Simpson; Yichuang Sun (University of Hertfordshire, UK)

**1570622345:** Physical Layer Anti-jamming Technique Using Massive Planar Antenna Arrays, Mahdi Chehimi (American University of Beirut (AUB), Lebanon); Elias Yacoub (Qatar University, Qatar); Ali Chehab (American University of Beirut, Lebanon); Mohammed Al-Husseini (Beirut Research and Innovation Center, Lebanon)

**Break — (15:30 - 16:00)**

**Thursday Afternoon Sessions (ThA) — (16:00 - 18:00)**

➤ **Session Title:** Mobile Computing (MC Symposium)

**ThA-5: Room: 1**

➤ **Session Chair:** Bechir Hamdaoui, [b.hamdaoui@gmail.com](mailto:b.hamdaoui@gmail.com), Oregon State University, USA

**Meeting Link:** <https://oregonstate.zoom.us/j/95015264501>, **Meeting ID:** 950 1526 4501

**1570633595:** CAFT: Congestion-Aware Fault-Tolerant Load Balancing for Three-Tier Clos Data Centers, Sultan Alanazi and Bechir Hamdaoui (Oregon State University, USA)

**1570633601:** Bert: Scalable Source Routed Multicast for Cloud Data Centers, Jarallah Alqahtani and Bechir Hamdaoui (Oregon State University, USA)

**1570629723:** RSU-Empowered Resource Pooling for Task Scheduling in Vehicular Fog Computing, Chaogang Tang (CUMT, Xuzhou, Jiangsu, China); Chunsheng Zhu (Southern University of Science and Technology, China); Xianglin Wei (Nanjing Telecommunication Technology Research Institute, China); Wei Chen (China University of Mining and Technology (CUMT), China); Joel J. P. C. Rodrigues (Federal University of Piauí (UFPI), Brazil & Instituto de Telecomunicações, Portugal)

**1570630619:** Service Continuity for CCAM Platform in 5G-CARMEN, Hamid Reza Barzegar and Van Thanh Le (University of Bolzano, Italy); Nabil El Ioini (Free University of Bozen, Italy); Claus Pahl (Dublin City University, Ireland)

**1570630753:** CE-D2D: Collaborative and Popularity-aware Proactive Chunks Caching in Edge Networks, Emna Baccour (HBKU, Qatar); Aiman Erbad, Amr Mohamed and Mohsen Guizani (Qatar University, Qatar); Mounir Hamdi (HBKU, Qatar)

**1570633574:** An Efficient LSI Based Multi-keyword Ranked Search Algorithm on Encrypted Data in Cloud Environment, Debasis Das; Sumit Kalra (IIT Jodhpur, India)

➤ <b>Session Title:</b> Data Analysis and Intelligence (Big Data Symposium)	<b>ThA-6: Room: 2</b>
➤ <b>Session Chair:</b> Khalid Elgazzar, <a href="mailto:Khalid.Elgazzar@uoit.ca">Khalid.Elgazzar@uoit.ca</a> , Univ. of Ontario Institute of Technology, Canada	
<b>Meeting Link:</b> <a href="http://meet.google.com/dgq-vnry-vfh">http://meet.google.com/dgq-vnry-vfh</a>	

**1570622154:** A Neural Network-based Sentiment Analysis Scheme for Tang Poetry, YongRui Tang (BUPT, China)

**1570622156:** A Game Battle Platform based on Web-API for Artificial Intelligence Education, Xiaofei Han, Junwei Zou, Wei Ren and Yan Sun (Beijing University of Posts and Telecommunications, China)

**1570622173:** A Novel Music Emotion Recognition Model for Scratch-generated Music, Zijing Gao (BUPT, China); Lichen Qiu (Dongyuqiao Primary School, China); Peng Qi and Yan Sun (BUPT, China)

**1570622153:** Siamese-Based BiLSTM Network for Scratch Source Code Similarity Measuring, Lingxi Zhang, Hong Luo and Wei Ren (Beijing University of Posts and Telecommunications, China)

**1570629390:** Optimizing Global Channel Matching for Multi-Hop Uplink NOMA-Assisted Cellular IoT with Cooperative Relay, Diya Ran, Zhixiang Yang, Lei Feng and Wenjing Li (BUPT, China); Qinghai Ou (Beijing Fibalink Communications Co. Ltd, China); Mohamed Cheriet (Ecole de technologie superieure (University of Quebec), Canada)

➤ <b>Session Title:</b> Mob-Comp & Crowd Management (Crowd Management Symposium)	<b>ThA-7: Room: 3</b>
➤ <b>Session Chairs:</b> Nizar Zorba, <a href="mailto:nizarz@qu.edu.qa">nizarz@qu.edu.qa</a> , Qatar University & Hossam Hassanein, Queens' U., Canada	
<b>Meeting Link:</b> <a href="https://qu.webex.com/qu/j.php?MTID=m0aa8b62688f026fcf5e844d2f9ee7c2c">https://qu.webex.com/qu/j.php?MTID=m0aa8b62688f026fcf5e844d2f9ee7c2c</a>	

**1570634289:** Location privacy-preserving Mobile Crowd Sensing with Anonymous Reputation, Arthur Mille (University of Moncton, Canada); Lutful Karim (Seneca College of Applied Arts and Technology, Canada); Jalal N Almhana (Universite de Moncton, Canada); Nargis Khan (Ryerson University, Canada)

**1570633511:** Multiview topological data analysis for crowdsourced service supply-demand gap prediction, Ahmed Ben Saïd and Abdelkarim Erradi (Qatar University, Qatar)

**1570633568:** FScaler: Automatic Resource Scaling of Containers in Fog Clusters Using Reinforcement Learning, Hani Sami (Concordia University, Canada); Azzam Mourad (Lebanese American University, Lebanon); Hadi Otrouk (Khalifa University, United Arab Emirates & CIISE, Concordia University, Canada); Jamal Bentahar (Concordia University, Canada)

**1570630479:** Context-Aware RPL-Based Mobile Crowd Sensing and Routing Protocol for Smart City Networks, Yahya Al Sawafi, Abderezak Touzene, Khaled Day and Nasser Alzeidi (Sultan Qaboos University, Oman)

**1570630484:** A Blockchain based Framework for Secure Data Offloading in Tactile Internet Environment, Vinay Chamola (BITS-Pilani, India); Vikas Hassija (Jaypee Institute of Information Technology Noida, India); Vatsal Gupta (Jaypee Institute of Information Technology, India); Sai Sessa Chalapathi G (Birla Institute of Technology and Science, India)

**1570634031:** Prioritized S-ALOHA for URLLC, Shubham Pandey (IIT-Ropar, India); Kartikey Shandilya (Jaypee Institute of Information Technology, Noida, India); Satyam Agarwal (IIT-Ropar, India)

**TECHNICAL PROGRAM**  
**IEEE IWCMC 2020**  
**Limassol, Cyprus, June 15<sup>th</sup> — 19<sup>th</sup>, 2020**

**Friday, June 19<sup>th</sup>, 2020**

**Friday Morning Sessions (FrM) — (08:30 - 10:30)**

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| <ul style="list-style-type: none"><li>➤ <b>Session Title:</b> Exciting Technologies in B5G Era (5G-EWNAT Workshop)</li><li>➤ <b>Session Chair:</b> Richie Leo, <a href="mailto:richie.leo@zte.com.cn">richie.leo@zte.com.cn</a>, ZTE Corporation, China</li><li><b>Meeting Link:</b> <a href="https://meetingsamer22.webex.com/meet/pr1269048798">https://meetingsamer22.webex.com/meet/pr1269048798</a>, 1269048798</li></ul> | <b>FrM-1: Room: 1</b> |
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- 1570629989:** A Modified Off-grid SBL Channel Estimation and Transmission Strategy for RIS-Assisted Wireless Communication Systems, Mengnan Jian; Yajun Zhao (ZTE Corporation, China)
- 1570629511:** Contention Based Massive Access Scheme for B5G: A Compressive Sensing Method, Yanna Bai; Wei Chen; Bo Ai; Zhangdui Zhong (Beijing Jiaotong University, China)
- 1570630088:** QoS Assurance in IAB Network, Lin Chen; Xueying Diao; Jie Chen; Ruiqi Liu (ZTE Corporation, China)
- 1570629987:** NLOS OAM-MIMO Transmission: Misaligned Channel Analysis and Pre-processing Scheme Design, Mengnan Jian (ZTE Corporation, China)
- 1570630254:** A new lower cost UL split option for ultra-low latency 5G fronthaul, Hadjer Touati (Institut Mines-Telecom, Telecom SudParis, France); Hind Castel-Taleb (Telecom SudParis, Université Paris Saclay, France); Badii Jouaber (Telecom SudParis, Institut Polytechnique de Paris, France); Sara Akbarzadeh (Davidson, France)
- 1570630546:** Joint User-Channel Assignment and Power Allocation For Non-Orthogonal Multiple Access In A 5G Heterogeneous Ultra-Dense Networks, Amel Khodmi; Sonia Ben Rejeb (Sup'com, Tunisia); Nazim Agoulmine (Universite of Every Val d'Essonne, France); Zied Choukair (Mediatron SupCom, Tunisia)

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| <ul style="list-style-type: none"><li>➤ <b>Session Title:</b> Secure Health (Secure-eH-mH in IoT Workshop)</li><li>➤ <b>Session Chair:</b> Khalid Abualsaud, <a href="mailto:k.abualsaud@qu.edu.qa">k.abualsaud@qu.edu.qa</a> (Qatar University, Qatar)</li><li><b>Meeting Link:</b> <a href="https://qu-edu.webex.com/qu-edu/j.php?MTID=m32e39f0355e0f943c3c8edc9d00208c5">https://qu-edu.webex.com/qu-edu/j.php?MTID=m32e39f0355e0f943c3c8edc9d00208c5</a></li><li>➤ <b>Meeting Number:</b> 121 353 8868, <b>Password:</b> 12345</li></ul> | <b>FrM-2: Room: 2</b> |
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- 1570643988:** A New Wearable ECG Monitor Evaluation and Experimental Analysis: Proof of Concept, Khalid Abualsaud and Muhammad Chowdhury (Qatar University, Qatar); Abdurrazzak Gehani (Al-Ahli Hospital, Qatar); Elias Yaacoub and Tamer Khattab (Qatar University, Qatar)
- 1570645001:** Medical IoT: A Comprehensive Survey of Different Encryption and Security Techniques, Suleiman K. Kharroub, Khalid Abualsaud and Mohsen Guizani (Qatar University, Qatar)
- 1570645307:** EEG-based Analysis Study for Patients Receiving Intravenous Antibiotic Medication, Zina Chkirbene; Abeer Al-Marridi (Qatar University, Qatar); Alaa Awad Abdellatif (Politecnico di Torino, Italy); Amr Mohamed and Aiman Erbad (Qatar University, Qatar); Mark OConnor, James Laughton, Anthony Villacorte and Johansen Menez (Hamad Medical Corporation, Qatar)
- 1570645289:** Smart Health Monitoring for Seizure Detection using Mobile Edge Computing, Zien Sheikh Ali, Nandhini Subramanian and Aiman Erbad (Qatar University, Qatar)
- 1570622464:** Wearable-sensors Based Activity Recognition for Smart Human Healthcare Using Internet of Things, Ning Hu; Shen Su (Guangzhou University); Chang Tang (China University of Geosciences, China); LuLu Wang (Huai'an Hospital of Xuzhou Medical University, China)
- 1570622209:** A secure three-factor authentication and biometrics-based key agreement scheme for TMIS with user anonymity, Amal Sammoud (University of Tunis El Manar, Tunisia); Mohamed Aymen Chalouf (University of Rennes 1, France); Omessaad Hamdi (Bordeaux University, France); Nicolas Montavont (Institut Mines Telecom / IMT Atlantique, France); Ammar Bouallegue (National School of Engineers of Tunis, Tunisia)

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| <ul style="list-style-type: none"><li>➤ <b>Session Title:</b> Communications in Vehicular Networks (Vehicular Symp.)</li><li>➤ <b>Session Chair:</b> Azzam Mourad, <a href="mailto:azzam.mourad@lau.edu.lb">azzam.mourad@lau.edu.lb</a> (Lebanese American University, Lebanon)</li><li><b>Meeting Link:</b> <a href="https://lau.webex.com/lau/j.php?MTID=mba90ab6d5bc219146b45671a3491e34c">https://lau.webex.com/lau/j.php?MTID=mba90ab6d5bc219146b45671a3491e34c</a></li><li><b>Meeting number:</b> 163 837 1318, <b>Password:</b> PRcnjldq953</li></ul> | <b>FrM-3: Room: 3</b> |
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- 1570622384:** Mitigating the Effects of Multipath Propagation in Vehicular Ad Hoc Networks, Tulio Lima; Paulo Victor



Goncalves Farias; Jacir Luiz Bordim (University of Brasilia, Brazil)

**1570629694:** Multi-Tier Location-Based Joint Channel Assignment and Power Control Architecture for Mobile Ad-Hoc Networks, Konstantinos Amouris (MOBITEK, USA)

**1570630026:** Impact of Interference on Visible Light Communication Performance in a Vehicular Platoon, Rami Khoder (UL & Versailles, Lebanon)

**1570630458:** HARQ feedback optimization techniques for improved reliability in Cellular Vehicle to Everything, Renata Leibel; Efstathios Katranaras (Sequans Communications, Greece); Guillaume Vivier (Sequans, France)

**1570630646:** Simulation Environment of a Communication System Using CDMA at 77 GHz, Maximilian Lübke; Jonas Fuchs; Victor Shatov; Anand Dubey; Robert Weigel; Fabian Lurz (FAU, Germany)

**1570634299:** Interference Mitigation based on NOMA for Scheduling Algorithm in V2X Environments, Emna bouhamed Rigane, Hend Marouane, Ala trabelsi, Faouzi Zarai (Enet'com, Tunisia)

**1570633563:** Context-Aware Communication for V2V Collision Avoidance Applications, Ameni Chtourou; Pierre Merdrignac; Oyunchimeg Shagdar (VEDECOM, France)

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| <p>➤ <b>Session Title:</b> Big Data and AI-Driven IoT Applications (5G-IoT Symp.)</p> <p>➤ <b>Session Chairs:</b> Fanqin Zhou, <a href="mailto:fqzhou2012@bupt.edu.cn">fqzhou2012@bupt.edu.cn</a>, <a href="mailto:fqzhou2012@gmail.com">fqzhou2012@gmail.com</a> (BUPT, China)</p> <p><b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m461bd6b7baac1ecf57af8f02cdf4784b">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m461bd6b7baac1ecf57af8f02cdf4784b</a></p> | <b>FrM-4: Room: 4</b> |
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**1570621649:** An Intelligent Dimming Algorithm of Streetlight Based on Fuzzy Neural Network; Yunpeng Xue (Beihang University, China); Lianhe Li (Henan Logistics Vocational College, China); Yang Xinxin, Weimin Diao and Gang Zhao (Beihang University, China)

**1570627882:** Method of Electronic Component Location, Grasping and Inserting Based on Machine Vision; Bin Xue; Chang Sun (Qingdao Zhongzhuang Vision Automation System Control Co., Ltd., China); Huihui Chu and Qingsen Meng (Qingdao Binhai University, China); Shuangben Jiao (Qingdao Zhongzhuang Vision Automation System Control Co., Ltd., China)

**1570628009:** Application of Improved BP Algorithm in Prediction of Axial Tension Performance and Crack Width Control Ability of UHPC; Xuxiang Tan; Feng Nan and Huadong Sun (Jiaotong University, China)

**1570628062:** An Image Recognition Algorithm of Soybean Diseases and Insect Pests Based on Migration Learning and Deep Convolution Network; Mingyuan Xin; Yong Wang (Heihe University, China)

**1570628096:** PCB Defect Recognition and Elimination Based on Secondary Error and Statistical Histogram; Rui Li and Bin Xue (Qingdao Binhai University, China); Kun Zhao (Qingdao Zhongzhuang Vision Automation System Control Co., Ltd., China); Huihui Chu (Qingdao Binhai University, China); Shuangben Jiao (Qingdao Zhongzhuang Vision Automation System Control Co., Ltd., China)

**1570628452:** Intelligent Monitoring Platform for Urban Pollution in Liaoning Province Based on Big Data; Zeng Weijia, Lu Xuming, Qin Fang and Bai Nan ( Dalian University of Science and Technology, China)

**Break — (10:30 - 11:00)**

**Friday Morning Sessions (FRM) — (11:00 - 13:00)**

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| <p>➤ <b>Session Title:</b> Applications of IoT Technologies I (5G-IoT Symp.)</p> <p>➤ <b>Session Chair:</b> Yan Zhang, <a href="mailto:yanzhang@buaa.edu.cn">yanzhang@buaa.edu.cn</a>, <a href="mailto:zhangyan_buaa@163.com">zhangyan_buaa@163.com</a> (Beihang University, China)</p> <p><b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m444b315c507e9bb896bcb9f3ba53b818">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m444b315c507e9bb896bcb9f3ba53b818</a></p> | <b>FrM-5: Room: 1</b> |
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**1570633460:** User Behavioral Preference Analysis Based on Location Information; Youmin Zhu and Yanchun Tan (Guangdong Ocean University, China); Yunhui Zhu (Guangzhou University, China)

**1570621712:** A Parallel Acceleration Method in Panoramic Video Mosaic System Based on 5G Internet of Things; Yan Zhang, Weimin Diao, Yang Xinxin and Gang Zhao (Beihang University, China)

**1570625396:** Research on Plant Diseases and Insect Pests Monitoring Technology under the Background of Internet of Things Technology; Linqun Fang (Yunnan Innovation Institute, BUAA, China)

**1570633423:** Real-time health monitoring system based on wearable devices; Chuqing Liu, Guichen Chen, Xueguang Yuan, Yangan Zhang and Zhenyu Xiao (Beijing University of Posts and Telecommunications, China)

**1570651589:** IoT Health Monitoring Systems Overview for Elderly Population, Khalil Guizani & Sghaier Guizani (Alfaisal University, KSA)

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| <p>➤ <b>Session Title:</b> Quantum Communications (QC Workshop)</p> <p>➤ <b>Session Chair:</b> Shahid Mumtaz, <a href="mailto:smumtaz@av.it.pt">smumtaz@av.it.pt</a>, Instituto de Telecomunicações, Portugal</p> <p><b>Link:</b> <a href="https://meetingsemea22.webex.com/meetingsemea22/j.php?MTID=m7eba872a1bdc1cd2651a416dfb276010">https://meetingsemea22.webex.com/meetingsemea22/j.php?MTID=m7eba872a1bdc1cd2651a416dfb276010</a></p> <p><b>Meeting ID:</b> 163 977 9713, <b>Password:</b> S4f5CGuDyC3</p> | <b>FrM-6: Room: 2</b> |
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**1570630159:** Quantum Homomorphic Encryption Based on Quantum Obfuscation, Yuanjing Zhang and Tao Shang (Beihang University, China); Jianwei Liu (BeiHang University, China); Wei Wu (Beijing University of Aeronautics & Astronautics, China)

**1570630372:** Routing and Key Resource Allocation in SDN-based Quantum Satellite Networks, Yan Wang; Yongli Zhao, Chen Wenzheng, Kai Dong, Xiaosong Yu and Jie Zhang (BUPT, China)

**1570630510:** Residual-adaptive Key Provisioning in Quantum-Key-Distribution Enhanced Internet of Things (Q-IoT), Xiang Yu Meng, Xiaosong Yu, Chen Wenzheng, Yongli Zhao and Jie Zhang (BUPT, China)

**1570633197:** Measurement-Device-Independent QKD Based on Orbital Angular Momentum with Dual Detectors, Haizheng Sun and Tao Shang (Beihang University, China); Jianwei Liu (BeiHang University, China)

**1570621933:** Performance of Lattice Reduction Aided Equalization for MIMO and Phased Array FBMC System, Jihed Ghodhbane, Noureddine Boujnah, Ridha Bouallegue (INNOVCOM, Tunisia)

➤ <b>Session Title:</b> Applications (Big Data Symp.)	<b>FrM-7: Room: 3</b>
➤ <b>Session Chair:</b> Chadi Abou Rjeily, <a href="mailto:chadi.abourjeily@lau.edu.lb">chadi.abourjeily@lau.edu.lb</a> , Lebanese American University, Lebanon	
<b>Meeting Link:</b> <a href="https://lau.webex.com/lau/j.php?MTID=m4d2e27fed4bbf6f9ffc78839c416919b">https://lau.webex.com/lau/j.php?MTID=m4d2e27fed4bbf6f9ffc78839c416919b</a>	

**1570622149:** AutoTrain: An Efficient Auto-training System for Small-scale Image Classification, Shaoxiao Yi, Junwei Zou, Wei Ren and Hong Luo (Beijing University of Posts and Telecommunications, China)

**1570622150:** An Automatic Analysis Tool Based on Computational Thinking for BlockPy Programs, Can Xu, Peng Qi and Yan Sun (Beijing University of Posts and Telecommunications, China)

**1570622151:** A Novel Text Features Jointing Model for Review Spam Filtering of Chinese, Faxin Zhang (BUPT, China); Lichen Qiu (Dongyueqiao Primary School, China); Peng Qi and Hong Luo (BUPT, China)

**1570622211:** Joint Extraction of Symptoms and Details in Chinese Medical Records using the Overlapping Mechanism, Qian Hu (AI Doctor Smart Healthcare Technology Ltd, China); Wan Dong (AI Doctor Smart Healthcare Technology Ltd., China); Ning Liu (Institute of Automation, Chinese Academy of Sciences, China); Jing Wang and Yanan Shen (AI Doctor Smart Healthcare Technology Ltd, China); Zhichao Wu (AI Doctor Smart Healthcare Technology Ltd., China)

**BREAK**

**13:00 – 13:30**

**Friday Afternoon Sessions (FRA) — (13:30 - 15:30)**

➤ <b>Session Title:</b> Applications of IoT Technologies II (5G-IoT Symposium)	<b>FrA-1: Room: 1</b>
➤ <b>Session Chair:</b> Lei Feng, <a href="mailto:fenglei@bupt.edu.cn">fenglei@bupt.edu.cn</a> (BUPT, China)	
<b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m0511aac2a9cffd3ef0078f62fb78e6e8">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=m0511aac2a9cffd3ef0078f62fb78e6e8</a>	

**1570628043:** Inheritance and Promotion of Sports Health Culture Based on Campus Informatization; DongSheng Wang (Henan College of Industry & Information Technology, China)

**1570628066:** Application Research of Computer-based Corpus of TCM in Vocational Colleges English Teaching; Yawei Yu; Jing Yu; Zhogn Min and Lulu Zhong (Jiangxi University of TCM Nanchang, China)

**1570628068:** Exploration of Computer-based Computer-based English Writing Teaching Mode in Higher Vocational Colleges from the Perspective of "Production-oriented Approach"; Yawei Yu; Jing Yu; Tengda Li and Wanli Feng (Jiangxi University of TCM Nanchang, China)

**1570628106:** Research and Practice of Microcomputer Principle and Interface Technology Course in College Teaching; Yufang Zhu (Guangdong University of Foreign Studies, China)

**1570628101:** Chain Drugstore Management System Based on Internet; Yufang Zhu (Guangdong University of Foreign Studies, China)

**1570628425:** Revised IPA Method for Citizen Satisfaction of Smart City Development; Chen Jih-Kuang (Zhaoqing U., China)

➤ <b>Session Title:</b> Next Generation Networking (NGSN Symp.)	<b>FrA-2: Room: 2</b>
➤ <b>Session Chair:</b> Sameh Sorour, <a href="mailto:sameh.sorour@queensu.ca">sameh.sorour@queensu.ca</a> , Queen's University, Canada	
<b>Meeting Link:</b> <a href="https://meet.google.com/gnq-umnq-mbi">meet.google.com/gnq-umnq-mbi</a>	

**1570617294:** A Collaborative Multi-Metric Interface Ranking Scheme for Named Data Networks, Boubakr Nour and Hakima Khelifi (Beijing Institute of Technology, China); Rasheed Hussain (Innopolis University & Networks and Blockchain Lab, Russia); Hassine Mounjla (University of Paris Descartes & Instiut Mines Telecom, France); Safdar Hussain Bouk (DGIST, Korea (South))

**1570629433:** A Label-based Producer Mobility Support in 5G-enabled ICN Networks, Oussama Serhane; Khadidja

Yahyaoui (Mustapha Stambouli University, Algeria); Boubakr Nour (Beijing Institute of Technology, China); Hassine MOUNGLA (University of Paris Descartes & Institut Mines Telecom, France)

**1570622166:** Hybrid Decision Based Deep Reinforcement Learning For Energy Harvesting Enabled Mobile Edge Computing, Jing Zhang; Jun Du; Jian Wang and Yuan Shen (Tsinghua University, China)

**1570633597:** Traffic Behavior in Cloud Data Centers: A Survey, Jarallah Alqahtani, Sultan Alanazi and Bechir Hamdaoui (Oregon State University, USA)

**1570635245:** Federated Learning for RSS Fingerprint-based Localization: A Privacy-Preserving Crowdsourcing Method, Bekir Ciftler; Abdullatif Albaseer; Nouredine Lasla; Mohamed M. Abdallah (Hamad Bin Khalifa University, Qatar)

**1570633419:** Adaptive Reinforcement Routing in Software Defined Vehicular Networks, Ankur Nahar; Debasis Das (IIT Jodhpur, Rajasthan, India)

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| <p>➤ <b>Session Title:</b> Vehicular &amp; Traffic (General Symposium)</p> <p>➤ <b>Session Chairs:</b> Nidal Nasser, <a href="mailto:nnidal@gmail.com">nnidal@gmail.com</a>, Alfaisal University, KSA</p> <p><b>Meeting Link:</b> <a href="https://us02web.zoom.us/j/88217896152?pwd=ZWw0d0VndTY2Vm9DTFFIZTdWcEdzUT09">https://us02web.zoom.us/j/88217896152?pwd=ZWw0d0VndTY2Vm9DTFFIZTdWcEdzUT09</a></p> <p><b>Meeting ID:</b> 882 1789 6152, <b>Password:</b> 8EMEuk</p> | <b>FrA-3: Room: 3</b> |
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**1570639647:** Electric Load Forecasting using EEMD and Machine Learning Techniques, Aqdas Naz; Nadeem Javaid (COMSATS Institute of Information Technology, Islamabad, Pakistan); Adia Khalid (CIIT, Islamabad, Pakistan); Muhammad Shoaib; Muhammad Imran (King Saud University, Saudi Arabia)

**1570639648:** TFPMS: Transactions Filtering Pattern Matching Scheme for Vehicular Networks based on Blockchain, Muhammad Zohaib Iftikhar; Nadeem Javaid; Sakeena Javaid (COMSATS University, Islamabad, Pakistan); Muhammad Imran (King Saud University, Saudi Arabia); Nidal Nasser (Alfaisal University, Saudi Arabia)

**1570639649:** An Incentive Scheme for VANETs based on Traffic Event Validation using Blockchain, Muhammad Sohaib Iftikhar; Nadeem Javaid; Omaji Samuel (COMSATS Institute of Information Technology, Pakistan); Muhammad Shoaib; Muhammad Imran (King Saud University, Saudi Arabia)

**1570639650:** Electricity Theft Detection using Pipeline in Machine Learning, Mubbashra Anwar; Nadeem Javaid (COMSATS Institute of Information Technology, Islamabad, Pakistan); Adia Khalid (CIIT, Islamabad, Pakistan); Muhammad Imran; Muhammad Shoaib (King Saud University, Saudi Arabia)

**1570639646:** Efficient Data Trading and Storage in Internet of Vehicles using Consortium Blockchain, Ayesha Sadiq; Nadeem Javaid; Omaji Samuel (COMSATS Institute of Information Technology, Pakistan); Adia Khalid (CIIT, Islamabad, Pakistan); Noman Haider (Victoria University Sydney Campus & University of Technology Sydney, Australia); Muhammad Imran (King Saud University, Saudi Arabia)

**1570639634:** Conditional Anonymity enabled Blockchain-based Ad Dissemination in Vehicular Ad-hoc Network, Muhammad Umar Javed; Abid Jamal; Nadeem Javaid (COMSATS Institute of Information Technology, Islamabad, Pakistan); Noman Haider (Victoria University Sydney Campus & University of Technology Sydney, Australia); Muhammad Imran (King Saud University, Saudi Arabia)

**Break — (15:30 - 16:00)**

**Friday Afternoon Sessions (FRA) — (16:00 - 18:00)**

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| <p>➤ <b>Session Title:</b> Energy Efficient Networking for IoT (E2N-IoT) Workshop</p> <p>➤ <b>Session Chair:</b> Adel Ben Mnaouer, <a href="mailto:adel@tud.ac.ae">adel@tud.ac.ae</a>, Canadian University Dubai, UAE</p> <p><b>Meeting Link:</b> <a href="https://tud.webex.com/tud/j.php?MTID=t29f8388076edfbc56caa6d2450def4bf">https://tud.webex.com/tud/j.php?MTID=t29f8388076edfbc56caa6d2450def4bf</a></p> <p><b>Password:</b> 7786542</p> | <b>FrA-4: Room: 1</b> |
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**1570632760:** Study of Nature Inspired Power-aware Wake-Up Scheduling Mechanisms in WSN, Lamia Chaari Fourati (Institut Supérieur d'Informatique et de Multimédia de Sfax, Tunisia); Sarah El-Kaffel (Laboratory of Technology for Smart Systems, Tunisia); Adel Ben Mnaouer (Canadian University Dubai, UAE); Farid Touati (Qatar University, Qatar)

**1570633154:** Secrecy Performance Analysis of Cooperative NOMA system with multiple DF Relays, Nesrine Zaghdoud (SUP'COM, Tunisia); Adel Ben Mnaouer (Canadian University Dubai, United Arab Emirates); Hatem Boujemaa (SupCom, Tunisia); Farid Touati (Qatar University, Qatar)

**1570634096:** An Autonomous Multi-Variable Outdoor Air Quality Mapping Wireless Sensors IoT Node for Qatar, Hasan Tariq; Abderrazek Abdaoui; Farid Touati and Mohammad Al-Hitmi (Qatar University, Qatar); Damiano Crescini (University of Brescia, Italy); Adel Ben Mnaouer (Canadian University Dubai, UAE)

**1570634364:** Energy Efficient Real time Outdoor Air Quality Monitoring System, Abderrazek Abdaoui; Sabbir Ahmad, Hasan Tariq and Farid Touati (Qatar University, Qatar); Adel Ben Mnaouer (Canadian University Dubai, United Arab Emirates); Mohammad Al-Hitmi (Qatar University, Qatar)

**1570651543:** Real time Application of Malware Patching on Decentralized IoT Systems Through Disease Spread Analysis,

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| ➤ <b>Session Title:</b> Applications of IoT Technologies III (5G-IoT Symp.)  | <b>FrA-5: Room: 2</b> |
| ➤ <b>Session Chair:</b> Tao Hong, <a href="mailto:hongtao@buaa.edu.cn">hongtao@buaa.edu.cn</a> (Beihang University, China)   |                       |
| <b>Link:</b> <a href="https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=ma56ba729e63c479f1f8f9edcdab1d4aa">https://etsmontreal.my.webex.com/etsmontreal.my/j.php?MTID=ma56ba729e63c479f1f8f9edcdab1d4aa</a> |                       |

**1570628033:** Application of Exercise Intervention Project in Mass Fitness under the Background of Information Age; DongSheng Wang (Henan College of Industry & Information Technology, China)

**1570628561:** Design and Implementation of Early Warning System Based on Dairy Cattle Activity Detection; Zuliang Wang (Xijing University, China); Yaqiang Liu (Beijing Andawell Science Technology Co Ltd, China)

**1570628584:** Design and Implementation of Kiwifruit Seedling Tracing System Based on QR Code and Electronic Label; Zuliang Wang, Chuangle Cao and Hongtao Yu (Xijing University, China)

**1570628744:** Design and Implementation of Kiwi Fruit Cold Storage Management System Based on RFID; Ting Zhang, Chuangle Cao and Hongtao Yu (Xijing University, China)

**1570628747:** Design and Implementation of Dairy Food Tracking System Based on RFID; Ting Zhang, Chuangle Cao and Hongtao Yu (Xijing University, China); Yaqiang Liu (Beijing Andawell Science Technology Co Ltd, China)

**1570637264:** Robust Text-independent Speaker recognition with Short Utterances using Gaussian Mixture Models, Rania Chakroun (Informatic, Tunisia)

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| ➤ <b>Session Title:</b> IoT Security & Trust (General Symposium)   | <b>FrA-6: Room: 3</b> |
| ➤ <b>Session Chair:</b> Chadi Abou Rjeily, <a href="mailto:chadi.abourjeily@lau.edu.lb">chadi.abourjeily@lau.edu.lb</a> , Lebanese American University, Lebanon                    |                       |
| ➤ <b>Meeting Link:</b> <a href="https://lau.webex.com/lau/j.php?MTID=ma1c04603971599aaa0c72178c0c9d3b2">https://lau.webex.com/lau/j.php?MTID=ma1c04603971599aaa0c72178c0c9d3b2</a> |                       |

**1570645309:** Blockchain based decentralized Trust Management framework, Omar Ait oualhaj (ENSIAS, Mohammed V University of Rabat, Morocco); Amr Mohamed, Aiman Erbad and Mohsen Guizani (Qatar University, Qatar)

**1570633623:** Towards Trust-Aware IoT Hashing Offloading in MEC, Rania Islambouli, Zahraa Sweidan and Azzam Mourad; Chadi Abou-Rjeily (Lebanese American University (LAU), Lebanon)

**1570639632:** A novel cooperative link selection mechanism for enhancing the robustness in scale-free IoT networks, Muhammad Awais (CIIT, Pakistan); Nadeem Javaid; Sakeena Javaid (COMSATS University, Islamabad, Pakistan); Adia Khalid (CIIT, Islamabad, Pakistan); Nidal Nasser (Alfaisal University, Saudi Arabia); Muhammad Imran (King Saud University, Saudi Arabia)

**1570641502:** Biometric-Based Blockchain EHR System (BBEHR), Mohammed Baqari; Ezedin Barka (UAE University, United Arab Emirates)

**1570639642:** Secure Energy Trading for Electric Vehicles using Consortium Blockchain and k-Nearest Neighbor, Tehreem Ashfaq; Nadeem Javaid; Muhammad Umar Javed (COMSATS University Islamabad, Islamabad, Pakistan); Muhammad Imran (King Saud University, Saudi Arabia); Noman Haider (Victoria University Sydney Campus & University of Technology Sydney, Australia); Nidal Nasser (Alfaisal University, Saudi Arabia)

**1570639645:** Robustness Optimization of Scale-Free IoT Networks, Muhammad Usman (COMSATS University Islamabad, Islamabad, Pakistan); Nadeem Javaid (COMSATS Institute of Information Technology, Islamabad, Pakistan); Adia Khalid (CIIT, Islamabad, Pakistan); Nidal Nasser (Alfaisal University, Saudi Arabia); Muhammad Imran (King Saud University, Saudi Arabia)

**END OF SESSIONS**





The **17<sup>th</sup>** International Wireless  
Communications and Mobile Computing  
Conference  
**June 28~July 2, 2021**  
**Beijing, China**

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- *KSII Transactions on Internet and Information Systems*
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- Paper Acceptance Notification: 30 March 2021
- Camera-ready Paper Submissions: 30 April 2021
- Registration Deadline for Authors: 30 April 2021

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