



## MENACOMM 2021 Virtual Program

Friday 3rd December 2021

Live Event 10:30AM (GMT+1)

[Youtube](#)

[Facebook](#)

Opening Session

Keynote Session 1

**Rachid Guerraoui, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland**

"Towards an Internet Machine"

Saturday 4th December 2021

Live Event 10AM (GMT+1)

[Youtube](#)

[Facebook](#)

Keynote Session 2

**Merouane Debbah, Technology Innovation Institute (TII), UAE**

"6G: from connected things to connected intelligence"

Keynote Session 3

**Ławomir Kukliński, Orange, Poland**

"Network Slicing Evolution: from 4G to 6G"

3rd - 5th December 2021

On-Demand Technical Sessions

### Session 1: Vehicular Applications

[Traffic Scene Semantic Segmentation by Using Several Deep Convolutional Neural Networks](#)

Amine Kherraki (Moulay Ismail University of Meknes, Morocco)

Muaz Maqbool (National University of Computer and Emerging Sciences, Pakistan);

Rajae El Ouazzani (Ecole Supérieure de Technologie, Morocco)

[Vertical Handover Decision using Machine Learning in Vehicular Platooning](#)

Rami Khoder (UL & Versailles, Lebanon)

Rola Naja (Lebanese University, Lebanon)

Salam Khaled Ismail (JobDiva Company, Lebanon)

Nadia Mouawad (Li-Parad Laboratory University of Versailles & University of Versailles, France)

Samir Tohme (Université de Versailles UVSQ, France)

[Privacy-Preserving Biometric-based Authentication Scheme for Electric Vehicles Charging System](#)

Muhammad Hataba and Ahmed Sherif (University of Southern Mississippi, USA)

Mohamed Elsersy (Higher Colleges of Technology, United Arab Emirates)

Mahmoud Nabil (North Carolina A & T, USA)

Mohamed M E A Mahmoud (Tennessee Tech University, USA)

Khaled Almorairi (Umm Al-Qura University, Saudi Arabia)

[A Markov Decision Process Model for a Reinforcement Learning-based Autonomous Pedestrian Crossing Protocol](#)

Sara El hamdani (Czech Technical University in Prague, Czech Republic)

Salah Eddine Loudari (UMI, Morocco)

Stanislav Novotny and Petr Bouchner (Technical University in Prague, Czech Republic)

Nabil Benamar (Moulay Ismail University, Morocco)

### Session 2: IoT and Wireless Sensor Networks

[IoT Nodes Behavior Analysis Under Constrained Environment Using RPL Protocol](#)

Saloua Ibrahimi (IMAGE Laboratory, School of Technology Molay Ismail University of Meknes, Morocco)

Hanane Lamaazi (Khalifa University of Science and Technology, Abu Dhabi, UAE, United Arab Emirates)

Nabil Benamar (Moulay Ismail University, Morocco)

[Abnormal Network Traffic Detection using Deep Learning Models in IoT environment](#)

Wijdan Choukri (Moulay Ismail University, Morocco)

Hanane Lamaazi (Khalifa University of Science and Technology, Abu Dhabi, UAE, United Arab Emirates)

Nabil Benamar (Moulay Ismail University, Morocco)

[A Multivariate Data Reduction Approach for Wireless Sensor Networks](#)

Ibrahim Atoui (Lebanese University, Lebanon)			
Abdallah Makhoul (University of Franche-Comté & FEMTO-ST, France)			
Raphaël Couturier (University Bourgogne Franche-Comté, France)			
Jacques Demerjian (Lebanese University - LU & Lebanese University, Lebanon)			
<a href="#">Effect of Unequal Clustering Algorithms in WirelessHART networks</a>			
Nouf Alharbi (Taibah University, Saudi Arabia)			
Lewis M. Mackenzie and Dimitrios P Pezaros (University of Glasgow, United Kingdom (Great Britain))			
<a href="#">A Wake-up Receiver Sensor Node Model for WSNs</a>			
Momen Almanasah (German Jordanian University, Jordan)			
Ala Khalifeh (German University of Jordan, Jordan)			
Ammar Gharaibeh (German Jordanian University, Jordan)			
<b>Session 3: Positioning and Estimation</b>			
<a href="#">2D DoA-based Positioning with Phase Jump Corrections and An Approximate Maximum Likelihood Estimator</a>			
Minh Hoang Le and Dirk Stock (EURECOM, France)			
Jean-Pierre Rossi (France)			
<a href="#">Study of Irregular Constellations of RFID Tags for Indoor Distance Estimation</a>			
Yiman Lin, Laurie Conteville, and Elizabeth Colin (EFREI Paris, France)			
<a href="#">3D Self-Positioning Algorithm based on joint DDoA-ToA</a>			
Minh Hoang Le and Dirk Stock (EURECOM, France)			
Jean-Pierre Rossi (France)			
<a href="#">Performance Analysis of Mixed Underwater and Terrestrial OWC Systems Over Foggy Weather</a>			
Ziyaur Rahman, Sparsh Wairy and Syed Mohammad Zafaruddin (BITS Pilani, India)			
<b>Session 4: Data and Social Media Applications</b>			
<a href="#">Characterizing and Detecting Similar Twitter Users</a>			
Ali Choumane and Fatima Yassin (Lebanese University, Lebanon)			
<a href="#">Google Searches and COVID-19 Cases in Saudi Arabia: A Correlation Study</a>			
Btool Hamoui (Umm Al-Qura University, Saudi Arabia)			
Abdulaziz Alashaikh (University of Jeddah, Saudi Arabia)			
Ahmed Sherif (University of Southern Mississippi, USA)			
Eisa Alanazi (Umm Al-Qura University, Saudi Arabia)			
Mahmoud Nabil (North Carolina A & T, USA)			
Waleed Alasmari (Umm Al-Qura University, Saudi Arabia)			
<a href="#">Identifying Information Superspreaders of COVID-19 from Arabic Tweets</a>			
Sarah Alqurashi (Umm Al-Qura University, Saudi Arabia)			
Abdulaziz Alashaikh (University of Jeddah, Saudi Arabia)			
Mahmoud Nabil (North Carolina A & T, USA)			
Eisa Alanazi (Umm Al-Qura University, Saudi Arabia)			
Ahmed Sherif (University of Southern Mississippi, USA)			
Waleed Alasmari (Umm Al-Qura University, Saudi Arabia)			
<b>Session 5: Security and Privacy</b>			
<a href="#">Advanced Encryption Standard for embedded applications: An FPGA-based implementation using VHDL</a>			
Md Arefin Rabbi Emon (IUT, Bangladesh)			
Hasan Jamil Apon, Fahim Faisal, Mirza Muntasir Nishat and Khandaker Adil Morshed (Islamic University of Technology, Bangladesh)			
Ahmed Mujtaba Al Naser, Fatema Zerin Jaba and Fariha Anzum (IUT, Bangladesh)			
<a href="#">Privacy-Aware and Hardware Acceleration-Based Authentication Scheme for Internet of Drones</a>			
Tom Henson (University of Southern Mississippi, USA)			
Amer Dawoud (University of Southern Mississippi, Canada)			
Ahmed Sherif (University of Southern Mississippi, USA)			
<a href="#">Attack-Specific Feature Selection for Anomaly Detection in Software-Defined Networks</a>			
Nadine Abbas, Youssef Nasser, Maryam Shehab and Sanaa Sharafeddine (Lebanese American University, Lebanon)			
<a href="#">Anomaly Based IDS Via Customised CUSUM Algorithm for Industrial Communication Systems</a>			
Ashraf Ali (The Hashemite University, Jordan); Andrew Ware (University of South Wales, United Kingdom (Great Britain))			
<b>Session 6: Advanced Image Processing</b>			
Developing Date Palm Tree Inventory from Satellite Remote Sensed Imagery using Deep Learning			
Ebrahim Ali Alburshaid (University of Bahrain, Bahrain)			
Mohab Mangoud (UoB, Bahrain)			
<a href="#">Video Features with Impact on User Quality of Experience</a>			
Nadine Abbas (Lebanese American University, Lebanon)			
Sirine Taleb (Phoenicia University, Lebanon); Hazem Hajj (American University of Beirut, Lebanon)			
<a href="#">A Comparative Study of Electromagnetic-Based Sensing Modalities for Red Palm Weevil Detection in Palm Trees</a>			
Fahad Al-Khanbashi, Nassr Al-Nassri and Mohammed Bait-Suwailam (Sultan Qaboos University, Oman)			
<a href="#">Detecting Heart Failure from Chest X-RAY Images Using Deep Learning Algorithms</a>			
Sara El Omary (School of Technology Meknes, Morocco)			
Souad Lahache (Fs Ibn Zohr University, Agadir, Morocco)			
Rajae El Ouazzani (Higher School of Technology MEKNES, Morocco)			
<a href="#">Logic-Based Neural Network for Image Compression Applications</a>			

Ziad Doughan, Ahmad El-Hajj, Rola Kassem and Ali Massoud Haidar (Beirut Arab University, Lebanon)

### Session 7: Machine and Deep Learning

#### [5G Service Architecture Automatic Code Generation](#)

Ying Zhang (Beijing Information Science & Technology University, China)

Zhan Xu (Beijing Information Science and Technology University, China)

Zhigang Tian (Tsinghua University, China)

Ruxin Zhi (Beijing Information Science & Technology University, China)

Lu Tian (Beijing Information Science and Technology University, China)

#### [Segmentation Fault: A Cheap Defense Against Adversarial Machine Learning](#)

Doha Al Bared and Mohamed Nassar (American University of Beirut, Lebanon)

#### [A Novel Classification of Machine Learning Applications in Healthcare](#)

Abeer Thamara (Al Azhar University, Egypt)

Mohamed Elsersy (Higher Colleges of Technology, United Arab Emirates)

Ahmed Sherif (University of Southern Mississippi, USA)

Hossam Hassan (Siliconarts Inc., Korea (South))

Omar Abdelsalam (Tennessee Tech University, USA)

Khaled Almorairi (Umm Al-Qura University, Saudi Arabia)

#### [Impacts of eigensolvers on spectral clustering](#)

Johny Matar (Lebanese University, Lebanon)

Hicham EL Khoury (Lebanese University & UL, Lebanon)

Jean-claude Charr (University of Franche Comte, France)

Christophe Guyeux (University of Franche-Comté, France)