



## MENACOMM 2026

Hammamet – Tunisia  
12-14 May 2026

### Conference Program

MENACOMM 2026 | May 12 – 14, 2026, Hammamet – Tunisia

<https://menacomm.org/programs/>

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## 2026 Middle East & North Africa COMMUNICATIONS Conference

12 – 14 May, 2026, Hammamet - Tunisia

<https://menacomm.org/>



Date	Time	Event	
Day 1 – Tuesday, May 12, 2026	8:00 – 9:00	Registration	
	9:00 – 09:30	<b>Welcome &amp; Opening Ceremony</b> General Chairs: Prof. Tarek Bejaoui & Prof. Rim Moussa Steering Committee Chair: Prof. Jacques Demerjian IEEE Tunisia Section Chair: Prof. Hassene Mnif IEEE Lebanon Section Chair: Prof. Nazih Moubayed Vice-Dean of the Faculty of Sciences of Bizerte : Prof. Habib Fathallah	
	09:30 – 10:30	<b>Keynote Speaker 1: Prof. Khaled B. Letaief (President Emeritus IEEE ComSoc)</b>	
	10:30 – 10:45	Coffee Break	
	10 :45 – 11 :45	<b>Keynote Speaker 2: Prof. Michele Luglio (University of Rome Tor Vergata, Italy)</b>	
	12:00 13:30 (On-site/ Virtual)	<b>A1- AI and Medical Imaging for Healthcare</b> <b>A2- Advancing IoT and AI for Smart Environments</b> <b>A3V- Privacy-Preserving AI and Data Quality</b> <b>A4V- AI in Education and Human-Centric Applications</b> <b>A5V- Wireless Networks and Quantum Communications</b>	
		13:30 -14:30	Lunch
		14:30 – 15:30	<b>Keynote Speaker 3: Prof. Imad Elhadj (American University of Beirut, Lebanon)</b>
		15 :30 – 16 :00	Coffee Break
		16:00 – 18:00 (On-site/Virtual)	<b>A6- Advances in Adaptive Networks and Autonomous Systems</b> <b>A7V- AI for Cybersecurity and Network Defense</b> <b>A8V- Telemedicine and AI in Healthcare</b> <b>A9V- Advances in Communications and Networking</b>
Day 2 – Wednesday, May 13, 2026	8 :00 – 9 :00	Registration	
	9 :00 – 10 :00	<b>Keynote Speaker 4: Prof. Abdallah Makhoul (University Marie et Louis Pasteur, France)</b>	
	10:00 – 10:30	Coffee Break	
	10 :30 – 12 :00 (on-site/online)	<b>B1- Next-Gen Networks and Advanced Communication Technologies</b> <b>B2V- Advances in Communications and Antenna Systems</b> <b>B3V- Next-Gen IoT &amp; AI-Powered Smart Apps</b> <b>B4V- IoT Security and Privacy-Preserving Systems</b> <b>Workshop: Sovereign AI: Designing the Future of Trusted Foundation Models</b>	
		12:00 -13:00	Lunch
		13:00 --14:00	<b>Awards Ceremony</b>
		14 :00 – 15 :00	<b>Keynote Speaker 5: Prof. Suat Özdemir (Hacettepe University, Türkiye)</b>
	15:00 – 15:30	Coffee Break	
	15 :30 – 17 :30 (on-site/online)	<b>B5- AI-powered Smart Solutions and Apps</b> <b>B6- Cybersecurity and AI-Driven Network Security</b> <b>B7V- Next-Gen AI for Smart Cities &amp; Dynamic Systems</b> <b>B8V- Innovations in Cybersecurity</b>	
		20:30 – 23:30	<b>Banquet</b>
Day 3	From 13:30	<b>Social event</b>	

## Full MENACOMM 2026 Conference Program

The live sessions of the conference will be held in Hammamet, Tunisia - Time Zone (GMT/UTC + 01:00 hour)

Day 1 – Tuesday, May 12, 2026

09:00 – 09:30

### Welcome & Opening Ceremony

#### Zoom Link:

<https://us05web.zoom.us/j/86392585295?pwd=f26Wi0NRGJgT211Zpl2BiGFH7hhRRB.1>

Meeting ID# 863 9258 5295

Code: 550758

Room: Cesare

**Prof. Tarek Bejaoui & Prof. Rim Moussa** (General Chairs)

**Prof. Jacques Demerjian** (Steering Committee Chair)

**Prof. Hassene Mnif** (IEEE Tunisia Section Chair)

**Prof. Nazih Moubayed** (IEEE Lebanon Section Chair)

**Prof. Habib Fathallah** (Vice-Dean of the Faculty of Sciences of Bizerta)

09:30 - 10:30

#### Zoom Link:

<https://us05web.zoom.us/j/86392585295?pwd=f26Wi0NRGJgT211Zpl2BiGFH7hhRRB.1>

Meeting ID# 863 9258 5295

Code: 550758

**Keynote Speaker 1: Prof. Khaled B. Letaief** (HKUST, Hong Kong, President Emeritus IEEE ComSoc)

Title: *Transforming Connectivity: AI Innovations for Next-Gen Wireless Networks*

Session Chair: *Prof. Chadi Abou-Rjeily* (Lebanese American University - LAU, Lebanon)

10:45 - 11:45

#### Zoom Link:

<https://us05web.zoom.us/j/86392585295?pwd=f26Wi0NRGJgT211Zpl2BiGFH7hhRRB.1>

Meeting ID# 863 9258 5295

Code: 550758

**Keynote Speaker 2: Prof. Michele Luglio** (University of Rome Tor Vergata, Italy)

Title: *Innovations in satellite networks for advanced architectures and services*

Session Chair: *Prof. Habib Ammari* (Texas A&M International University, USA)

12:00 – 13:30

**Session A1: AI and Medical Imaging for Healthcare**

Session Chair: **Prof. Hela Mahersia** (University of Carthage, Tunisia)

Room: Cesare

**1571236441 [Noise Benchmarking and Denoising Evaluation on the ENID Medical Imaging Dataset](#)**

Yosr Haddad (University of Carthage, Tunisia); Hela Mahersia (University of Carthage, Tunisia & National Engineering School of Tunis, Tunisia)

[Run presentation](#)

**1571257164 [A Comparative Study of Deep Learning Models for Pancreatic CT Image Denoising](#)**

Ranim Bejaoui (University of Carthage, Tunisia); Rim Mahouachi (University of Carthage); Hela Mahersia (University of Carthage, Tunisia & National Engineering School of Tunis, Tunisia)

[Run presentation](#)

**1571257394 [Comparative Evaluation of Classical Filters and Conditional GANs for MRI Image Denoising](#)**

Nourhen Yahyaoui, Selma Batti and Habib Fathallah (University of Carthage, Tunisia)

**1571257142 [Pachychoroid Detection Based on Artificial Intelligence Algorithms](#)**

Khedhira Mariam (University of Carthage, Tunisia); Hela Mahersia (University of Carthage, Tunisia & National Engineering School of Tunis, Tunisia); Fadi Kacem (University of Carthage, Tunisia)

**1571232255 [Automated Knowledge Graph Construction from Unstructured Medical Data](#)**

Fatma Safi (Université de Carthage, Tunisia); Fadi Kacem (University of Carthage, Tunisia); Walid Jallouli (Habib Bougatfa Hospital, Tunisia); Habib Fathallah (University of Carthage, Tunisia)

[Run presentation](#)

**1571233206 [Explainable Kidney Stone Detection from CT Scans: Integrating Grad-CAM with YOLO Model](#)**

Fatma Safi (Université de Carthage, Tunisia); Fadi Kacem (University of Carthage, Tunisia); Walid Jallouli (Habib Bougatfa Hospital, Tunisia); Habib Fathallah (University of Carthage, Tunisia)

[Run presentation](#)

**Session A2: Advancing IoT and AI for Smart Environments**

Session Chair: **Prof. Jihene Rezgui** (University of Montreal & College maisonneuve, Canada)

Room: Cornélie

**1571257033 [Energy-Efficient IoT Localization with Uncertainty-Aware EKF and Hybrid Markov-CNN-PCA Models](#)**

Maher Jabberi (University of Sousse, Tunisia); Bassem Sellami (UMR Espace-Dev, University of Pe, France); Hakiri Akram (University of Pau & Pays de l'Adour, France); Abderrazak Jemai (INSAT Institute, Tunisia & Researcher at SERCOM/EPT, Tunisia)

**1571257305 [Real-Time Forest Fire Risk Assessment in Tunisia: Integrating LoRaWAN IoT with Machine Learning and FWI](#)**

Rania Maaoui, Olfa Dridi and Habib Fathallah (University of Carthage, Tunisia); Karim Fathallah (Laboratory Idea Lab, Tunisia)

**1571258027 [Satellite-IoT Access Technologies and Simulation Frameworks in 6G Non-Terrestrial Networks: Limitations and Modeling Challenges](#)**

Khaoula Kacem (SUP'COM, Tunisia); Nawel Zangar (ESIEE PARIS, France); Soumaya Hamouda (SupCom, Tunisia)

**[1571247136 Spatiotemporal Data Acquisition and Validation Pipeline for Groundwater Storage Based on Satellite Gravimetry and Hydrological Models](#)**

Eya Dridi (University of Carthage, Tunisia); Dorsaf Omri (University of Tunis El Manar, Tunisia); Tarek Bejaoui and Habib Fathallah (University of Carthage, Tunisia)

[Run presentation](#)

**[1571257205 A Comprehensive Survey of Driver Behavior Classification in Smart Transportation Systems: From Rule-Based Models to AI Agents](#)**

Chaima Tayachi and Olfa Dridi (University of Carthage, Tunisia); Mohamed Barkaoui (University Laval, Tunisia); Habib Fathallah (University of Carthage, Tunisia)

[Run presentation](#)

**Session A3V: Privacy-Preserving AI and Data Quality**

**Zoom Link:**

<https://us05web.zoom.us/j/86392585295?pwd=f26Wi0NRGJgT211Zpl2BiGFH7hhRRB.1>

Meeting ID# 863 9258 5295

Code: 550758

Session Chair: **Dr. Marianne Abi Kanaan** (Antonine University, Lebanon)

Room: Colisée

**[1571254503 Generating Synthetic Tabular Data Using Large and Small Language Models](#)**

Uendi Muça (University of Marie et Louis Pasteur, France); Hadi Koubeissy (BMW Group, Germany); Abdallah Makhoul (University of Marie et Louis Pasteur, France & Femto-St, France)

[Run presentation](#)

**[1571256727 Genetic Algorithm-Based Privacy Budget Optimization for Differentially Private Gradient Boosting Decision Trees](#)**

Marianne Abi Kanaan (Antonine University, Baabda, Lebanon); Elie Chicha (Holy Spirit University of Kaslik, Lebanon); Jean-François Couchot (University of Franche-Comté, France); Maroun Abi Assaf (USEK, Lebanon)

[Run presentation](#)

**[1571248361 A Retrieval-Augmented Framework for Executable Context-Aware Data Quality Assessment](#)**

Hadi Fadlallah and Ibrahim Dhaini (University of Sciences and Arts in Lebanon, Lebanon); Rima Kilany Chamoun (Saint-Joseph University, Lebanon & USJ-ESIB, Lebanon)

[Run presentation](#)

**[1571248363 Agentic AI for Context-Aware and Autonomous Data Quality Assessment](#)**

Fatima Mubarak and Hadi Fadlallah (University of Sciences and Arts in Lebanon, Lebanon)

[Run presentation](#)

**[1571260769 AI Agent-Based Sound Dataset Generation and Neural Network Classification](#)**

Zahraa Almokaddem and Rami Tawil (Lebanese University, Lebanon)

[Run presentation](#)

**[1571239111 A Hyper-Heuristic Framework for Human-in-the-Loop Combinatorial Optimization](#)**

Kassem Danach, Sr (Al Maaref University, Lebanon & Chairperson, Lebanon); Jomana Al Haj Hassan (Management Information Systems, Lebanese International University, Lebanon); Samir Haddad and Jinane Sayah (University of Balamand, Lebanon); Joseph Merhej (Faculty of Sciences II, Lebanon); Chadi Kallab (Lebanese American University, Lebanon)

[Run presentation](#)

## Session A4V: AI in Education and Human-Centric Applications

### Zoom Link:

<https://zoom.us/j/96514596693?pwd=SljP6eNb3ulBHKTNatNOWEXHhGpnZ4.1>

Meeting ID# 965 1459 6693

Code: 848007

Session Chair: **Dr. Charbel Gemayel** (Antonine University, Lebanon)

Room: Caligula

### **1571239060** [AI-Driven Prediction of Students' Academic Performance in Higher Education](#)

Mohamad Fayed, Ziad Doughan and Soubhi Abou Chahine (Beirut Arab University, Lebanon)

[Run presentation](#)

### **1571242983** [Enhanced Stacking Ensemble Using Multi-Level Meta-Learning for Student Course Evaluations Sentiment Analysis](#)

Ramzi Habbal, Ziad Doughan and Soubhi Abou Chahine (Beirut Arab University, Lebanon)

[Run presentation](#)

### **1571256957** [Unlocking Student Autonomy: The Indirect Positive Effect of Generative AI Use on Academic Performance via Self-Regulated Learning](#)

Suryateja Jonathan Gandha (Bina Nusantara University, Indonesia); Jeklin Harefa (BINUS University, Indonesia)

[Run presentation](#)

### **1571256404** [Fine-Tuning and Agentic Workflows for Lebanese Arabizi Understanding and Generation](#)

Joseph Azar (Université Marie et Louis Pasteur & Femto-ST / DISC, France); Abbass Abdullah, Amir Amine, Mohammad Khalife and Hassan Bazzi (Université Marie et Louis Pasteur, France); Raphaël Couturier (University Bourgogne Franche-Comté, France)

[Run presentation](#)

### **1571235002** [LoRA-Efficient BERT for Arabic Aspect-Based Sentiment Analysis](#)

Asma Mohammed Shayea (UOB, Bahrain); Mohab A Mangoud M (University of Bahrain, Bahrain)

[Run presentation](#)

## Session A5V: Wireless Networks and Quantum Communications

### Zoom Link:

<https://us04web.zoom.us/j/79626309689?pwd=ap5w6yayfKUqQePRnFAGOtMJ2H2rdP.1>

Meeting ID# 796 2630 9689

Code: 543391

Session Chair: **Dr. Amna Riaz** (Northumbria University, United Kingdom)

Room: Hannibal

### **1571251023** [ALIGN: Experimental Ground Characterisation of 976nm and 1550nm Beacon/Data Lasers for CubeSat Optical Inter-Satellite Links](#)

Amna Riaz (Northumbria University, United Kingdom (Great Britain))

[Run presentation](#)

**1571236081 Reliability Analysis of UAV-Assisted Urban FSO Backhaul Under Joint Weather, Turbulence, and Pointing Errors**

Amani Chouikhi (SupCom, Tunisia); Maha Sliti (University of Carthage, higher school of communication of tunis, Tunisia)

[Run presentation](#)

**1571257403 Design and Performance Analysis of a Quantum-Illumination LiDAR System**

Hawraa Slaiman and Sara Abou Chakra (Lebanese University, Lebanon); Hassanein Rabah (Wise Analysis, Ltd, United Kingdom (Great Britain))

[Run presentation](#)

**1571260897 Perspectives on Routing in LEO/NTN Space Networks: Classical, Agentic, and Quantum**

Charbel Mattar (LaRRIS, Lebanese University, Fanar, Lebanon); Jacques Bou Abdo (University of Cincinnati, USA); Abdallah Makhoul (University of Marie et Louis Pasteur, France & Femto-St, France); Benoit Piranda (University Marie et Louis Pasteur, France & FEMTO-ST Institute, France); Jacques Demerjian (Lebanese University, Lebanon)

[Run presentation](#)

**1571257182 Deep vs. Shallow Neural Networks for Power Control in Full-Duplex D2D Communication**

Bachar Chaabani and Oussama Bazzi (Lebanese University, Lebanon)

[Run presentation](#)

**1571248851 Code IM-Assisted RIS for D2D Communications with Hardware Imperfections and Phase Noise**

Widad Belaoura (Université M'hamed Bougara Boumerdès, Algeria); Saud Althunibat (Princess Sumaya University for Technology, Jordan); Mazen Omar Hasna (Qatar University, Qatar); Khalid A. Qaraqe (Hamad Bin Khalifa University & College of Science and Engineering, Qatar)

[Run presentation](#)

**14:30 - 15:30**

**Zoom Link:**

<https://us05web.zoom.us/j/86392585295?pwd=f26Wi0NRGjgT211Zpl2BiGFH7hhRRB.1>

Meeting ID# 863 9258 5295

Code: 550758

**Keynote Speaker 3: Prof. Imad Elhadj (American University of Beirut, Lebanon)**

Title: ***AI For or Against Privacy?***

Session Chair: ***Dr. Jad Bassil (University Marie and Louis Pasteur, Femto-St Institute, France)***

***Room: Cesare***

**16:00 – 18:00**

**Session A6: Advances in Adaptive Networks and Autonomous Systems**

Session Chair: ***Dr. Jad Bassil (University Marie and Louis Pasteur, Femto-St Institute, France)***

***Room: Cesare***

**1571247920 Would Learning Help? Adaptive CRC-QC-LDPC Selection for Integrity in 5G-NR V2X**

Sarah Al-Shareeda (The Ohio State University, USA & Istanbul Technical University, Turkey); Gülcihan Özdemir (Istanbul Technical University, Turkey); Arouj Fatima (Emerging Energy Contracting Est, Bahrain); Mădălin-Dorin Pop (Politehnica University of Timișoara, Romania); Bander A Jabr and Yasser Bin Salamah (King Saud University, Saudi Arabia); Jacques Demerjian (Lebanese University, Lebanon)

[Run presentation](#)

**1571246786** [Secure Connected k-Coverage in Spatial Wireless Sensor Networks](#)

Habib M Ammari (Texas A&M International University, USA); Dakshanya Maddala (Texas A&M University-Kingsville, USA)

**1571256552** [Evaluating Multi-Agent Path Finding Algorithms for Modular Robot Reconfiguration](#)

Omar Khalil (University Marie et Louis Pasteur, Femto-St Institute, France); Jad Bassil (University Marie and Louis Pasteur, Femto-St Institute, Cnrs, Montbéliard, France); Perla Tannoury (University of Bourgogne Franche-Comte, France); Benoit Piranda (University Marie et Louis Pasteur, France & FEMTO-ST Institute, France); Abdallah Makhoul (University of Marie et Louis Pasteur, France & Femto-St, France)

[Run presentation](#)

**1571256555** [Self-Reconfiguration of Modular Robotic Systems and Programmable Matter Using Reinforcement Learning](#)

Khodor Ghayad (Antonine University, Lebanon); Jad Bassil (University Marie and Louis Pasteur, Femto-St Institute, Cnrs, Montbéliard, France); Abdallah Makhoul (University of Marie et Louis Pasteur, France & Femto-St, France); Roger Achkar (Antonine University, Lebanon); Jad Nassar (Antonine University & TICKET Lab, Lebanon)

**1571259668** [Benchmarking ROS2 Nav2 for Autonomous Indoor Navigation in a Simulated Institutional Environment](#)

Jihene Rezgui, Noah Favreau and Ilian Djorf (College Maisonneuve, Canada)

[Run presentation](#)

**Session A7V: AI for Cybersecurity and Network Defense**

**Zoom Link:**

<https://us05web.zoom.us/j/86392585295?pwd=f26Wi0NRGJgT211ZpI2BiGFH7hhRRB.1>

Meeting ID# 863 9258 5295

Code: 550758

Session Chair: **Dr. Amna Eleyan** (Manchester Metropolitan University, United Kingdom)

Room: Cornélia

**1571252251** [Adversarially Robust Channel Estimation for One-Bit Massive MIMO Using Auxiliary Classifier GAN](#)

Tarek Ali, Mohammed Al-Khalidi, Ali Kashif Bashir and Amna Eleyan (Manchester Metropolitan University, United Kingdom (Great Britain)); Rabab Al-Zaidi (University of Salford, United Kingdom (Great Britain))

[Run presentation](#)

**1571269292** [Adaptive Hyperheuristic Framework for Dynamic Network Defense Optimization](#)

Kassem Danach, Sr (Al Maaref University, Lebanon & Chairperson, Lebanon); Samir Haddad (University of Balamand, Lebanon); Jomana Al Haj Hassan (Management Information Systems, Lebanese International University, Lebanon); Jinane Sayah (University of Balamand, Lebanon); Joseph Merhej (Faculty of Sciences II, Lebanon); Chadi Kallab (Lebanese American University, Lebanon)

[Run presentation](#)

**1571236066** [A Controller-Centric ML-Driven Security & Knowledge Plane for SDN-NFV Architectures](#)

Zakiya Alfughi (Western University, Canada); Abdelkader Ouda (University of Western Ontario, Canada)

[Run presentation](#)

**1571242125** [An Analytical Framework for Integrating Artificial Intelligence into Cybersecurity Decision-Making](#)

Afia Naeem Alam Din and Wael M El-Medany (University of Bahrain, Bahrain)

[Run presentation](#)

**1571257438** [DDoS Attack Detection in Cloud Systems Using a Hybrid Stacked Ensemble](#)

Nematullah Khan, Raad Alharthi, Fahad Alzahrani and Mourad Benmalek (Al Yamamah University, Saudi Arabia); Abdelouahid Derhab (King Saud University, Saudi Arabia)

[Run presentation](#)

**1571252253** [Adversarial Defense Strategies for 6G PHY: A Comprehensive Survey](#)

Tarek Ali, Mohammed Al-Khalidi, Ali Kashif Bashir and Amna Eleyan (Manchester Metropolitan University, United Kingdom (Great Britain)); Rabab Al-Zaidi (University of Salford, United Kingdom (Great Britain)); Tarek Bejaoui (University of Carthage, Tunisia)

[Run presentation](#)

**Session A8V: Telemedicine and AI in Healthcare**

**Zoom Link:**

<https://zoom.us/j/96514596693?pwd=SljP6eNb3ulBHKTNatNOWEXHhGpnZ4.1>

Meeting ID# 965 1459 6693

Code: 848007

Session Chair: **Prof. Hela Mahersia** (*University of Carthage, Tunisia*)

Room: Colisée

**1571257414** [AI-Driven Recovery Prediction Using Wearable Sensors for Musculoskeletal Injury](#)

Joseph Mouhayar (Ticket Research Lab Antoine University, Baabda, Lebanon); Youssef Keryakos and Youssef Bou Issa (Ticket Research Lab Antoine University, Baabda); Christian Salim (Inria, France)

[Run presentation](#)

**1571232472** [A Supervisor-Coordinated Multi-Agent Architecture with ReAct Reasoning and FHIR Integration, Achieving 41% Diagnostic Time Reduction in Telemedicine Workflows](#)

Muthukumarapandian Chandrasekaran (CitiusTech, USA)

[Run presentation](#)

**1571256416** [Zero-Shot ECG Arrhythmia Classification from Waveform Images: An Experimental Study with Vision-Language Models](#)

Joseph Azar (Université Marie et Louis Pasteur & Femto-ST / DISC, France); Raphaël Couturier (University Bourgogne Franche-Comté, France); Ke Du (China Pharmaceutical University, China); Jiaying Yan (Qingyi (Shanghai) Intelligent Technology Co., Ltd., China)

[Run presentation](#)

**1571245299** [Autism Spectrum Disorder Detection: Privacy-Preserving AI Approaches](#)

Shyamali Das (Silicon University, India); Ali Ahmed (Victoria University of Wellington, New Zealand); Pamela Choudhury (SIT Bhubaneswar, India); Hrudaya Kumar Tripathy (KIIT University, USA); Tarek Gaber (The University of Salford, United Kingdom (Great Britain)); Mahmoud H. Qutqut (Gulf University for Science & Technology, Kuwait & Applied Science Private University, Jordan)

[Run presentation](#)

**1571256461** [AI-Driven Communication-Aware Lightweight Transformer-Neuro-Fuzzy Framework for Robust EEG Monitoring over Wireless Telemedicine Networks](#)

Alaa Daher (Electrical and Computer Engineering, Lebanon); Mohammad Ayache (Beirut Arab University (BAU), Lebanon); Soubhi Abou Chahine (Beirut Arab University, Lebanon)

[Run presentation](#)

**[1571256219 An Optimized Deep Learning Model for Sleep Apnea Detection](#)**

Malik Abualzait (Associate Researcher, Jordan); Mahmoud H. Qutqut (Gulf University for Science & Technology, Kuwait & Applied Science Private University, Jordan); Ali Ahmed (Victoria University of Wellington, New Zealand); Fadi Almasalha (Applied Science Private University, Jordan)

[Run presentation](#)

**[1571245703 Vision Transformer-Based ECG Arrhythmia Classification with Dual-Mode Augmentation for IoT Healthcare Systems](#)**

Aymen Abid (CES Lab - ENIS, Sfax, Tunisia); Omar Cheikhrouhou (CES Laboratory, National School of Engineers of Sfax, Tunisia & University of Sfax, Tunisia); Olfa Gaddour (National School of Engineers of Sfax, Tunisia & ENIS/University of Sfax, Tunisia)

[Run presentation](#)

**Session A9V Advances in Communications and Networking**

**Zoom Link:**

<https://us04web.zoom.us/j/79626309689?pwd=ap5w6yayfKUqQePRnFAGOtMJ2H2rdP.1>

Meeting ID# 796 2630 9689

Code: 543391

Session Chair: **Dr. Sara Abou Chakra** (Lebanese University, Lebanon)

Room: Caligula

**[1571236089 Learning-Assisted Proactive Reattachment in Tree-Structured VLC-VANETs](#)**

Rim Touhami (SUP'COM, Tunisia); Maha Sliti (University of Carthage, higher school of communication of tunis, Tunisia)

[Run presentation](#)

**[1571257384 Agentic AI in Distributed SDN: Synchronization and Design Framework](#)**

Rawan Alsheikh and Etimad Fadel (King Abdulaziz University, Saudi Arabia); Nadine Akkari (Jeddah International, Saudi Arabia)

[Run presentation](#)

**[1571276464 Task-Aware Semantic Communications for 6G Under Finite Blocklength: Joint Reliability, Blocklength, Power and Compute Optimisation](#)**

Iacovos Ioannou (Philips University, Cyprus & University of Cyprus and CYENS Centre of Excellence, Cyprus); Ala Khalifeh (German University of Jordan, Jordan); Nagaradjane Prabagarane (Sri Sivasubramaniya Nadar College of Engineering, India); Vitawat Sittakul (King Mongkut's University of Technology North Bangkok, Thailand); Vasos Vassiliou (University of Cyprus & CYENS Center of Excellence, Cyprus)

[Run presentation](#)

**[1571228076 Performance Evaluation of Tomcat Across Oracle Linux Versions in a Legacy Environment](#)**

Elisa Benetti (LepidaScpA, Italy); Gianluca Mazzini (LepidaSpA & UniFe, Italy)

[Run presentation](#)

**[1571268828 Cloud-Native, AI-Augmented Fault Correlation and Root Cause Analysis for Multi-Vendor Networks](#)**

Sesha Kiran Gonaboyina (IEEE Member, USA); Balu Chavan (IndependentResearcher, USA); Nareshkumar Soundarajan (Concentrix Catalyst, USA)

[Run presentation](#)

09:00 - 10:00

**Zoom Link:**

<https://us05web.zoom.us/j/81763889363?pwd=A5PD5u545a3XskhSTxxoKphLKfUMLO.1>

Meeting ID# 817 6388 9363

Code: 343005

**Keynote Speaker 4: Prof. Abdallah Makhoul (University Marie et Louis Pasteur, France)**

Title: *Toward Intelligent Programmable Matter: Distributed Self-Reconfiguration and Embedded AI*

Session Chair: **Prof. Hela Mahersia (University of Carthage, Tunisia)**

Room: Cesare

10:30 – 12:00

**Session B1: Next-Gen Networks and Advanced Communication Technologies**

Session Chair: **Prof. Chadi Abou-Rjeily (Lebanese American University - LAU, Lebanon)**

Room: Cesare

**1571240696 [A Novel Probabilistic Relay Selection Protocol for Buffer-Aided Cooperative Networks](#)**

Chadi Abou-Rjeily (Lebanese American University (LAU), Lebanon); Naim Aoun (Lebanese American University, Lebanon)

**1571239439 [Stomata-Inspired Reconfigurable Square Ring Slot Antennas for 5G Applications](#)**

Buthaina Al Siyabi (Sultan Qaboos University, Oman & University of Technology and Applied Science, Oman); Hassan Al-Lawati (Sultan Qaboos University, Oman); Mohammed Bait-Suwailam (Communication and Information Research Center, Sultan Qaboos University, Oman & Dept. of ECE, Sultan Qaboos University, Oman); Joseph Jervase (Sultan Qaboos University, United Arab Emirates)

**1571257391 [Flexible Phase Shifter Based on Liquid Metal Vias for Reconfigurable Antenna Applications](#)**

Sana Gharsalli (University of Carthage, Tunisia & Polytechnic School of Tunisia, Tunisia)

**1571236908 [WIP: AI-Based Dynamic 5G Channel Optimization for TSN over 5G Using MPNN-TD3](#)**

Syed Tasnimul Islam (Chemnitz University of Technology, Germany)

**1571249510 [ELaP: End-To-End Latency Prediction for Edge Computing Applications](#)**

Akash Cuntur Shrinivasmurthy (Dortmund University of Applied Sciences and Arts, Germany); Ali Kadhum Idrees and Jaime S Burbano (University of Applied Sciences and Arts Dortmund, Germany); Rolf Schuster (Open Edge Computing Initiative, Germany)

**1571236775 [Sensor Antennas for Early Warning Systems: Requirements, Challenges and Future Directions](#)**

Rula S Alrawashdeh (Mutah University, Jordan)

[Run presentation](#)

## Session B2V: Advances in Communications and Antenna Systems

### Zoom Link:

<https://us05web.zoom.us/j/81763889363?pwd=A5PD5u545a3XskhSTxxoKphLkFUMLO.1>

Meeting ID# 817 6388 9363

Code: 343005

Session Chair: **Dr. Sara Abou Chakra** (*Lebanese University, Lebanon*)

Room: Hannibal

### **1571248589** [An Electrical Model for Software Defined Radio Sub-THz Systems](#)

Chady Geagea (Lebanese University, Lebanon); Ali Al-Hadi Tlais (American University of Beirut, Lebanon); Sara Abou Chakra (Lebanese University, Lebanon); Gunes Karabulut Kurt (Ecole Polytechnique de Montreal, Canada)

[Run presentation](#)

### **1571236753** [Frequency Diversity 3D Printed DRA for Wireless Applications](#)

Jana Mohammad AlNatour (The University of Jordan, Jordan); Layan T. AbuRayyan (University of Jordan, Jordan); Raneem Farouq Abdelrahim (Khalifa University, United Arab Emirates); Yanal S Faouri (The University of Jordan, Jordan)

[Run presentation](#)

### **1571263447** [Secrecy Analysis of Pinching-Antenna Systems](#)

Osamah S. Badarneh (German Jordanian University, Jordan); Hugerles S Silva (University of Brasília, Brazil); Meysam Ghanbari (Hamad Bin Khalifa University, Qatar); Yazan H. Al-Badarneh (The University of Jordan, Jordan); Tamer Khattab and Mazen Omar Hasna (Qatar University, Qatar); Khalid A. Qaraqe (Hamad Bin Khalifa University & College of Science and Engineering, Qatar)

[Run presentation](#)

### **1571236756** [3D Printed Microstrip Array Antenna Loaded with Dielectric Resonators for Frequency Agility Applications](#)

Layan T. AbuRayyan (University of Jordan, Jordan); Raneem Farouq Abdelrahim (Khalifa University, United Arab Emirates); Jana Mohammad AlNatour and Yanal S Faouri (The University of Jordan, Jordan)

[Run presentation](#)

## Session B3V: Next-Gen IoT & AI-Powered Smart Apps

### Zoom Link:

<https://zoom.us/j/93242749750?pwd=efAPPlcKSa1bzFf9UbKdSKGsFk3vIG.1>

Meeting ID# 932 4274 9750

Code: 135075

Session Chair: **Prof. Abdelaziz Sahbani** (*University of Carthage, Tunisia*)

Room: Colisée

### **1571256396** [Adaptive First-Person Shooter: Real-Time Game Difficulty Adjustment Based on Player Stress Levels](#)

Joseph Azar (Université Marie et Louis Pasteur & Femto-ST / DISC, France); Georges Chaiban, Nabil Moussa and Bilal Zahraman (Université Marie et Louis Pasteur, France)

[Run presentation](#)

**1571243785 [IoT-Enabled Deep Learning System for Strawberry Cultivation Viability and Disease Detection in Senegal: Ka-Nguessa](#)**

Fatoumata Baldé (Université Alioune Diop de Bambey, Senegal); Mamadou Korka Diallo and Alla LO (Université Alioune DIOP de Bambey, Senegal)

[Run presentation](#)

**1571255911 [Design of an IoT-Based Smart Water Quality Monitoring System with Artificial Intelligence](#)**

Hala Ben Ali, Elaf Ebdah and Luae' Al-Tarawneh (Princess Sumaya University for Technology, Jordan)

[Run presentation](#)

**1571250816 [A Speech-Aware Edge System for Adaptive Acoustic Masking in IoT Devices](#)**

Saeed Serwan Abdulsattar and Mohab A Mangoud M (University of Bahrain, Bahrain); Fayzeh Abdulkareem Jaber (University of Technology Bahrain, Bahrain & Arabian Gulf University, Bahrain)

[Run presentation](#)

**1571250437 [Design and Deployment of a Minimal Federated Learning Prototype for IoT Devices](#)**

Sajjad Abdulla and Mohab A Mangoud M (University of Bahrain, Bahrain)

[Run presentation](#)

**Session B4V: IoT Security and Privacy-Preserving Systems**

**Zoom Link:**

<https://us06web.zoom.us/j/82297221726?pwd=s71sn3yB8V5ISbynrbS4zih7bmEE5M.1>

Meeting ID# 822 9722 1726

Code: 189755

Session Chair: **Prof. Nadine Abbas** (*Lebanese American University – LAU, Lebanon*)

Room: Caligula

**1571235675 [BlindGate: A Gateway Architecture for Practical Privacy-Preserving Deep Packet Inspection on Encrypted Traffic](#)**

Evan Gunawan (BINUS University, Indonesia); Yohan Muliono (Bina Nusantara University, Indonesia)

[Run presentation](#)

**1571255859 [Real-Time Visual Privacy Preservation in Mobile Mixed Reality](#)**

Zaynab Al Haj, Salam A. Tabet, Ayman Kayssi and Imad H Elhajj (American University of Beirut, Lebanon)

[Run presentation](#)

**1571252594 [Secure Coded Caching in Wireless Networks](#)**

Batoul Zghaib (Saint Joseph University, Lebanon & ULFG, Lebanon); Yasser Fadlallah (University of Sciences and Arts in Lebanon, Lebanon)

[Run presentation](#)

**1571256285 [Towards Real-Time Service Classification in Tor: A Supervised Machine Learning Approach](#)**

Reem Khalife (Lebanese University, Lebanon); Bassem Haidar (ESIEA, France); Carole Bassil (Lebanese University, Lebanon)

[Run presentation](#)

**1571256701 [Federated DDQN for SDN Intrusion Prevention Under Cross-Domain Heterogeneity](#)**

Rafi Srayoui (Lebanese University, Lebanon); Bassem Haidar (ESIEA, France); Carole Bassil (Lebanese University, Lebanon)

[Run presentation](#)

**1571252245 [Adversarial Robustness of Lightweight Channel Estimators for Secure 6G Edge Networks](#)**

Tarek Ali, Mohammed Al-Khalidi, Ali Kashif Bashir and Amna Eleyan (Manchester Metropolitan University, United Kingdom (Great Britain)); Rabab Al-Zaidi (University of Salford, United Kingdom (Great Britain)); Tarek Bejaoui (University of Carthage, Tunisia)

[Run presentation](#)

**Workshop: Sovereign AI - Designing the Future of Trusted Foundation Models**

Session Chair: **Prof. Habib Fathallah** (University of Carthage, Tunisia)

Room: Cornélia

**1571267766 [Exploring Vision-Language Models for Weakly Supervised Video Anomaly Detection: Experiments and Analysis](#)**

Olfa Saket, Anis Ben Aicha and Habib Fathallah (University of Carthage, Tunisia)

**1571266199 [Pretrained Biomedical Foundation Models: Comparative Analysis and Practical Applications in Healthcare](#)**

Mounira Zouaghi, Fadi Kacem and Habib Fathallah (University of Carthage, Tunisia)

**1571266518 [Exploring Open-Weight Foundation Models: From Transformers to Multimodal AI](#)**

Chaima Tayachi and Olfa Dridi (University of Carthage, Tunisia); Mohamed Barkaoui (University Laval, Tunisia); Habib Fathallah (University of Carthage, Tunisia)

[Run presentation](#)

**1571266576 [Toward Sovereign Foundation Models for the MENA Region: Balancing Efficiency, Cultural Alignment, and Data Sovereignty](#)**

Housseem Eddine Lassoued and Habib Fathallah (University of Carthage, Tunisia); Anis Ben Aicha (SUPCOM, Tunisia)

**1571266599 [A Survey on Foundation Models for Industrial Intelligence: Architectures, Training Paradigms, and Applications](#)**

Nourhen Yahyaoui and Habib Fathallah (University of Carthage, Tunisia); Mohamed Barkaoui (University Laval, Tunisia); Bilel Elayeb (RIADI-GDL Research Lab., Tunisia)

[Run presentation](#)

**1571272011 [A Home Energy Management System Using Alternating Operation and Temperature-Controlled AC](#)**

Mohsen Nasri (LMON, Tunisia)

[Run presentation](#)

**14:15 - 15:15**

**Zoom Link:**

<https://us05web.zoom.us/j/81763889363?pwd=A5PD5u545a3XskhSTxxoKphLKfUMLO.1>

Meeting ID# 817 6388 9363

Code: 343005

**Keynote Speaker 5: Prof. Suat Özdemir** (Hacettepe University, Türkiye)

Title: **Digital Twin-Driven Task Offloading for Next-Generation IoT Networks**

Session Chair: **Dr. Nadine Akkari** (Jeddah International, Saudi Arabia)

Room: Cesare

15:30 – 17:30

**Session B5: AI-powered Smart Solutions and Apps**

Session Chair: **Prof. Abdelaziz Sahbani** (University of Carthage, Tunisia)

Room: Cesare

**1571234557 [Communication and Machine Learning Framework for Just-in-Time Adaptive Interventions Targeting Eating Behavior](#)**

Edward Sazonov (The University of Alabama, USA); Delwar Hossain and Siavash Esfandiari Fard (University of Alabama, USA); Md Billal Hossain (The University of Alabama, USA); Megan A McCrory (Boston University, USA); Janine Higgins (Children's Hospital Colorado, USA); Graham Thomas (Brown University, USA)

**1571232462 [A Simulation Framework for Pre-Deployment Optimization of Digital Twin Architectures in Resource-Constrained Precision Agriculture](#)**

Sourour Meddeb and Selma Batti (University of Carthage, Tunisia); Khaled Boussetta (Universite Sorbonne Paris Nord, France); Habib Fathallah (University of Carthage, Tunisia)

**1571236620 [MD-AGC: A Multi-Descriptor Adaptive Gamma Correction for Enhanced Urban Mapping and Smart City Analysis](#)**

Chaima Ben Fraj, Bf (University of Carthage, Tunisia & Artificial Intelligence Data Engineering Applications Laboratory, Tunisia); Dorsaf Omri (University of Tunis El Manar, Tunisia); Tarek Bejaoui (University of Carthage, Tunisia)

[Run presentation](#)

**1571255134 [PSO-Driven Actionable Counterfactual Explanations for Smart Building Energy Management](#)**

Özgecan Muyanlı Kopan (Hacettepe University, Turkey); İbrahim Kök (Ankara University, Turkey); Feyza Yildirim Okay (Gazi University, Turkey); Suat Ozdemir (Hacettepe University, Turkey)

**1571236764 [State of Charge Estimation for Electric Vehicle Batteries Using Temporal Convolutional Networks](#)**

Ghada Toumi (University of Carthage, Tunisia); Abdelaziz Sahbani (University of Tunis El Manar, Tunisia & University of Carthage, Tunisia); Hela Mahersia (University of Carthage, Tunisia & National Engineering School of Tunis, Tunisia)

[Run presentation](#)

**1571256529 [Accuracy and Coverage Assessment of Water Polo Positioning System](#)**

Florent Cotton (Samovar, Télécom SudParis, Institut Polytechnique de Paris, France & Efrei Research Lab, France); Elizabeth Colin (EFREI Paris, France); Laurie Contevelle (Efrei Paris, France); Christiano Rodrigues (Federal University of Ceará, Brazil & Engineering School of Information and Digital Technologies (EFREI), France); Wegrzyn-Wolska Katarzyna (EFREI PARIS, France)

**Session B6: Cybersecurity and AI-Driven Network Security**

Session Chair: **Prof. Ahmed M. El-Hajj** (American University of Beirut, Lebanon)

Room: Cornélia

**1571234950 [Integrating Post-Quantum Cryptography and AI-Driven Security in Multi-Tier Network Architectures](#)**

Mustafa El Bizri (Beirut Arab University, Lebanon); Ahmed M. El-Hajj (American University of Beirut, Lebanon); Layth Sliman (EFREI- Paris, France); Ali Massoud Haidar (Beirut Arab University, Lebanon)

**1571236359 [LLM-Based Advanced Persistent Threat Attribution: A Novel Framework for Enhanced Cyber Threat Intelligence](#)**

Adel Alshamrani (University of Jeddah, Saudi Arabia)

**1571257375** [Autonomous Security Framework for AI-Native 6G Networks: Architecture and Threat Taxonomy](#)

Faten Hasni and Nefzi Arij Salha (University of Carthage, Tunisia); Hakiri Akram (University of Pau & Pays de l'Adour, France); Abderrazak Jemai (INSAT Institute, Tunisia & Researcher at SERCOM/EPT, Tunisia)

**1571257385** [A Formal Framework for Provable Security in AI-Native 6G Networks](#)

Nefzi Arij Salha and Faten Hasni (University of Carthage, Tunisia); Hakiri Akram (University of Pau & Pays de l'Adour, France); Abderrazak Jemai (INSAT Institute, Tunisia & Researcher at SERCOM/EPT, Tunisia)

**Session B7V: Next-Gen AI for Smart Cities & Dynamic Systems**

**Zoom Link:**

<https://us05web.zoom.us/j/81763889363?pwd=A5PD5u545a3XskhSTxxoKphLKfUMLO.1>

Meeting ID# 817 6388 9363

Code: 343005

Session Chair: **Dr. Kabalan Chaccour** (Antonine University, Lebanon)

Room: Colisée

**1571245252** [Evaluating Temporal Fusion Transformers for Short-Horizon Urban Traffic Forecasting Under Real-World Deployment Constraints](#)

Khang Hoang Nguyen and Dennis Xu (Johns Creek High School, USA)

[Run presentation](#)

**1571269285** [A Hybrid Learning--Optimization Framework for Dynamic Vehicle Routing Using Real-World Postal Delivery Data](#)

Kassem Danach, Sr (Al Maaref University, Lebanon & Chairperson, Lebanon); Samir Haddad (University of Balamand, Lebanon); Jomana Al Haj Hassan (Management Information Systems, Lebanese International University, Lebanon); Jinane Sayah (University of Balamand, Lebanon); Joseph Merhej (Faculty of Sciences II, Lebanon); Chadi Kallab (Lebanese American University, Lebanon)

[Run presentation](#)

**1571251754** [AI-Assisted Emergency Dispatch for Smart Cities: A Multi-Source Data Fusion Approach](#)

Christophe Guyeux (University of Franche-Comté, France)

[Run presentation](#)

**1571262982** [Cross-Layer AI Optimization of Signaling and Media Planes in Cloud-Based Contact Center Architectures](#)

Balakrishnan Devaraj (Cognizant Technology Solutions, USA); Gokul Pandey (IEEE Senior Member, USA); Rajesh Kumar Kallapari and Dharma Chada (USA)

[Run presentation](#)

**1571267401** [Anomaly Detection and Exceedance Forecasting in IoT Sensor Networks: An MLOps Pipeline Approach](#)

Vipin Kataria (Picarro, USA); Nitin Kumar (Marriott International, USA); Vishal Bharadwaj Meruga (Valparaiso University, USA)

[Run presentation](#)

## Session B8V: Innovations in Cybersecurity

### Zoom Link:

<https://zoom.us/j/93242749750?pwd=efAPPlcKSa1bzFf9UbKdSKGsFk3vIG.1>

Meeting ID# 932 4274 9750

Code: 135075

Session Chair: **Dr. Amna Eleyan** (Manchester Metropolitan University, United Kingdom)

Room: Caligula

### **1571230773** [Business Continuity and Disaster Recovery: A Public Administration Use Case](#)

Enrica Salbaroli (Lepida SpA, Italy); Gianluca Mazzini (University of Ferrara and LepidaSpA, Italy)

[Run presentation](#)

### **1571231240** [Leveraging Identity and Access Management to Mitigate Insider Threats](#)

Zlatan Moric (Algebra University, Croatia); Vedran Dakic and Chinecherem Kalu Kalu (Algebra Bernays University, Croatia)

[Run presentation](#)

### **1571234878** [MAIR: A Modular AI-Ready Framework for Scalable Incident Response and Autonomous Governance in Next-Decade Cybersecurity](#)

Olufunsho I. Falowo and Jacques Bou Abdo (University of Cincinnati, USA)

[Run presentation](#)

### **1571236768** [Comparing and Evaluating the Effectiveness of File Activity-Based Authentication Compared to Multi Factor Authentication](#)

Matthew Austin Vincenzo (Bina Nusantara University, Indonesia); Nathan Jason Lowen (Universitas Bina Nusantara, Indonesia); Adior Gandawidjaja and Aditya Kurniawan (Bina Nusantara University, Indonesia)

[Run presentation](#)

### **1571236769** [A Security Architecture for Hybrid PaaS Mitigating Identity, Network, and Application Risks](#)

Afnan Alsaleh, Nesreen Alotaibi and Shahad Alaskar (Al Yamamah University, Saudi Arabia); Kashif Saleem (King Saud University, Saudi Arabia); Mourad Benmalek and Kamel Haouam (Al Yamamah University, Saudi Arabia)

[Run presentation](#)

### **1571252391** [Governance Framework for Resilient Critical Infrastructure](#)

Taiwo Peter Akinremi and Jacques Bou Abdo (University of Cincinnati, USA); Jacques Demerjian (Lebanese University, Lebanon)

[Run presentation](#)