

# IEEE ComNet 2024

November 5<sup>th</sup> - 7<sup>th</sup> 2024

## PROGRAM

**SUP'COM**  
Higher School of Communication of Tunis

**MEDIA'RON**

**ED TIC**  
SUP'COM  
École Supérieure de Technologie  
de l'Information et de la Communication

**IEEE**

**IEEE** Tunisia  
Section  
[www.ieee.tn](http://www.ieee.tn)

**DAY1**

**Tuesday, November 5<sup>th</sup>, 2024**

2:30 pm

**Opening session**

*Conference chairs talks*

**Keynotes Talk Session**

3 pm –  
4 pm

**Towards connecting the remaining unconnected**

*Mohamed Slim Alouini*

*King Abdullah University of Science and Technology (KAUST)*

**Break**

**Session 1 AI and big data for networks and digital communications**

**Enhancing Smart Handover Using Machine Learning in 5G Networks (\*)**

*Housseem Eddine Rezgui, Mimoun Hamdi, Fethi Tlili*

**Hybrid DF and SIR forwarding strategy in cooperative communications and higher order modulations**

*Slim Chaoui (\*)*

**Enhancing QoS for Dynamic Load Balancing in 6G Networks using SDN and Deep Reinforcement Learning**

*Mohamed Amine Hechmi*

16:30pm-  
17:30pm

**DAY 2**

**Wednesday, November 6<sup>th</sup>, 2024**

**Keynote Talk Session**

9 am – 10 am

**Machine Learning Over Networks: From Fundamentals to Applications**

*Tamer El Batt*

*The American University in Cairo (AUC)*

**Session 2 AI and big data applied to cybersecurity**

10am –  
10:45am

**MalPID: Malicious Prompt Injection Detection Dataset for Large Language Model based Applications**

*Sihem Omri, Manel Abdelkader, Mohamed Hamdi*

**Graph Convolutional Network (GCN) Approach for Fingerprint Security**

*Hedi Boukamcha, Olfa Ben Ahmed*

**Break**

**Session 3 AI and big data applied to cybersecurity (2)**

11:15am -  
12:15 am

**Security Evaluation of a Novel MAC Based on Hash Functions and 6D Chaotic Maps**

*Omessead Ben Mbarak*

**The Role of Computer Forensics in Network Security Incident Handling: A Systematic Review (\*)**

*Aminah M. Algahtani*

**Virtual Cluster Security Challenges and Solutions in Cloud Computing Environments (\*)**

*Almaha Adel*

**Lunch Break**

## Session 4 AI and big data applied to cybersecurity (3)

2:30 pm –  
4:30 pm

**Malware Detection based on Machine Learning Methods, Analysis, and Tools (\*)**

*Almaha Adel*

**IoT Data Privacy and Security Issues in Terms of Management, Organizational, Technological and Environmental (\*)**

*Jawaher Alshehri, M.M Hafizur Rahman*

**A Secure Multi-Hop communication framework for Nomadic Devices in LoRaWAN networks**

*Rafik Louati, Mariem Thaalbi, Nabil Tabbane*

**Securing Edge AI in Healthcare: A Comprehensive Architectural Analysis**

*Yasmine Ben Dhieb, Mohamed Ould-Elhassan, Nader Karmous, Ridha Bouallegue*

## DAY 3 Thursday, November 7<sup>th</sup>, 2024

### Keynote Talk Session

9am – 10am

**From 5G to 6G: Cybersecurity of Future Networks**

***Roberto Di Pietro***

*King Abdullah University of Science and Technology (KAUST)*

Break

### Session 5 Services and applications AI and big data

10:30am -  
12 am

**Planning for Penetration Testing in Small & Medium Enterprises: Challenges and Best Practices (\*)**

*Jawaher Alshehri, Almaha Alhamed, Mounir Frikha*

**SISO-LoRa Wireless Communication Aided By Reconfigurable Intelligent Surfaces**

*Ali Kotti*

**A new framework for failure classification in 5G network core**

*Damos Ayobo Abongo, Asma Kehila, Safa Cherif, Rahma Bouraoui, Zaineb Labidi*

## Closing Ceremony

