2024 IEEE International Middle East Conference on Communications and Networking

IEEE MECOM

17–20 November 2024 // Abu Dhabi, UAE

IEEE MECOM is the conference of the IEEE Communications Society serving the Middle East area and surrounding countries. It gathers visionary researchers in academia and industry from all over the world to the Middle East to share their knowledge and explore the dynamic region and its rich history. IEEE MECOM features a comprehensive and timely technical program, addressing the hottest topics in the areas of communications and networking.

IEEE MECOM 2024 is delighted to invite researchers in industry and academia to submit workshop papers on new and emerging topics within the scope of:

RIS-empowered Intelligent 6G Communications and Sensing

The development of reconfigurable intelligent surfaces (RIS) and the holographic MIMO (HMIMO) paradigm has garnered substantial interest from both academia and industry. This interest stems from the advantages of low-cost, compact, lightweight, and low-power-consumption hardware implementations. By exploiting RIS/HMIMO systems in communications and sensing, performance in these two respective fields is anticipated to improve significantly. Therefore, this workshop aims to bring together practitioners and researchers from academia and industry to address the fundamental and practical challenges associated with RIS/HMIMO systems for communications and sensing. Topics of interest including, but are not limited to the following:

- RIS/HIMIMO-empowered 6G physical layer communications technologies
- AI-inspired or machine learning-assisted signal processing techniques for communications and sensing in RIS/HMIMO systems
- Modeling of hardware, antennas, channels or propagation for communications and sensing in RIS/HMIMO systems
- Applications and demonstrations of communications and sensing in RIS/HMIMO systems
- Security, privacy, and sustainability aspects for communications and sensing
- Waveform design for integrated communications and sensing for RIS/HMIMO systems
- Physical-layer algorithms and transmission protocols for communications and sensing systems
- Energy-efficient, scalable (network and/or transceiver hardware) architectures and strategies for communication and sensing in RIS/HMIMO techniques
- Near-field communications and sensing with RIS/HMIMO techniques
- Application and algorithm design in stacked intelligence metasurfaces (SIM)-assisted communications and sensing

Workshop Organizing Committee

Li Wei, Nanyang Technological University, Singapore
Chongwen Huang, Zhejiang University, China
Chau Yuen, Nanyang Technological University, Singapore
Carlos-Faouzi Bader, Technology Innovation Institute, UAE
George C. Alexandropoulos, National and Kapodistrian University of Athens, Greece
Yajun Zhao, ZTE Corporation, China

Steering Committee

Mérouane Debbah, Khalifa University of Science and Technology, UAE
Zhaoyang Zhang, Zhejiang University, China

IMPORTANT DATES

Workshop Submission:

10 August 2024

Workshop Paper Acceptance Notification:

20 August 2024

Camera-Ready Submission:

26 August 2024

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