

# IEEE WIRELESS COMMUNICATIONS AND NETWORKING CONFERENCE

Pioneering the Future of Wireless Communications

## | 13-16 April 2026 // Kuala Lumpur, Malaysia

The IEEE Wireless Communications and Networking Conference (WCNC) is a top-ranked, flagship conference of the IEEE Communications Society, bringing together researchers from academia, industry, and government. IEEE WCNC 2026 will be hosted in the warm and wonderful city of Kuala Lumpur, Malaysia and will be conducted in person, allowing attendees to fully benefit from the conference atmosphere and experience.

Prospective authors are invited to submit their works in the form of research papers describing significant and innovative contributions to the field of wireless communications and networking, in accordance with the four technical tracks listed below. Accepted and presented papers will be published in the IEEE WCNC 2026 Conference Proceedings and submitted to IEEE Xplore.

Proposals for half- or full-day tutorials and workshops are also invited in all communication and networking topics.

### **IMPORTANT DATES**

Paper Submission

26 October 2026 - FIRM

Notification of Acceptance:

11 January 2026

**Camera-Ready Papers:** 

7 February 2026

Workshop Proposal Submission Deadline:

15 December 2025

Tutorials Proposal
Submission Deadline:

2 November 2025

To learn more about WCNC 2026 in Kuala Lumpur and how to submit your paper, please visit our website: wcnc2026.ieee-wcnc.org







### Track 1: **Physical Layer and Communication Theory**

Track Co-Chairs: George Alexandropoulos, NKUA, Greece; Chuan Huang, CUHK at Shenzhen, China; Gunes Karabulut Kurt, Polytechnique Montréal, Canada

- Antennas and RF
- Channel Modeling and Estimation
- Coding Theory and Techniques
- Energy Harvesting and Low **Energy Communication**
- Feedback and Two-Way Communication
- Free Space Optical Communication
- Holographic Surfaces and Reconfigurable Intelligent Surfaces
- Information Theory Aspects of Wireless Communications
- Integrated Sensing and Communications
- Iterative Techniques, Detection, and Decoding
- Low-Resolution Communication
- Millimeter-Wave and Terahertz
- MIMO, Massive MIMO, and Cell-free Massive MIMO
- Near-Field Communication and Sensing
- Physical Layer Security
- Propagation and Interference Modeling
- Relaying and Self-Backhauling
- Semantic Communications
- Short Packet and Finite Block **Length Communications**
- Waveforms and Modulation
- Wireless Power and Information Transfer

### Track 2: **Medium Access Control** and Networking

Track Co-Chairs: Koichi Adachi, Keio University, Japan; Aryan Kaushik, Manchester Met, UK; Dusit Tao Niyato, NTÚ,

- Age and Value of Information for Networks
- Backscatter Communications
- Cognitive Radio and Networking
- Cooperative Communications and Networking
- Edge Computing, Edge Intelligence, and Fog Networks
- Emerging Medium Access Schemes in the 5G and Beyond
- Energy-Efficient and Green Networking
- Load Balancing and Cell/Band
- IoT Networks and Protocols
- Low-Power Wireless Networks
- Multiple Access and Contention
- Multihop Networks
- Network Economics
- Network Slicing
- ORAN Programmability of **MAC and Network Functions**
- RAN Data Collection and Storage Enhancement
- Resource Allocation for **Wireless Communications** and Networks
- Resource Management
- Resource Orchestration for Positioning, Navigation, & Timing Systems
- Routing and Congestion Control
- Scheduling and Opportunistic Communications
- SDN/NFV
- Spectrum Sensing, Access, and Sharing
- Unlicensed Spectrum and Licensed/Unlicensed Inter-Networking
- URLLC, Time Sensitive, and **Deterministic Networking**
- Wireless Network Security and Privacy

### Track 3: **Machine Learning** and Optimization for **Wireless Systems**

Track Co-Chairs: Yansha Deng, King's College London, UK; Guido Maier, Politecnico di Milano, Italy; Jun Zhang, HKUST, Hong Kong, China

- Bayesian Optimization for Wireless Communications
- Communication-inspired **Machine Learning**
- Convex and Non-Convex **Optimization for Wireless** Communications
- Data-driven Network Modelling and Optimization
- Datasets for Wireless Systems and Channels
- Deep Learning for Wireless Communications
- Deep Unfolding for Wireless Communications and Networks
- Distributed Learning and **Federated Learning for Wireless** Communications
- Distributed Optimization for Wireless Communications
- End-to-end Machine Learning over Wireless Channels
- Game-Theoretic Approaches to **Wireless Communications**
- Implementation of Machine **Learning Algorithms in Wireless** Networks
- Large Language Models and Generative Al for Wireless
- Machine Learning Methods for Wireless Localization
- Networking Architectures for Artificial Intelligence
- Online Learning for Wireless Networks
- Performance Analysis of ML Techniques for Wireless Communications
- Reinforcement Learning for **Wireless Communications**
- Scalability of ML for Wireless Communications
- Semantic and Goal-Oriented Communications
- Transfer Learning for Wireless Communications and Networks
- Unsupervised and Generative Models

### Track 4: **Emerging Technologies, Network Architectures,** and Applications Track Co-Chairs: Jihong Park, SUTD, Singapore; Abdallah Shami, The University of Western Ontario, Canada; Liang Xiao, Xiamen University, China

- 5G NR and 6G Standardization
- ■802.11 and Next-Generation Wi-Fi
- AI-RAN
- Blockchain and Cryptography
- Connected Vehicles
- Digital Twin Networks
- E-health and Mobile Health
- Experiments, Prototypes, and Testbeds
- Fluid Antenna Communications
- Full-Duplex Communication Networks
- Innovative Implanted and Wearable Devices
- Intelligent Beamforming Relays
- IoT and Machine Type Communications
- Joint Radar and Communications
- Low-altitude Communications and Networks
- Molecular and Nano Communications
- Networking Support for Virtual and Augmented Reality
- O-RAN
- Quantum Communications
- Satellite and Deep Space Communications
- Sensing and Localization
- Software Defined Radio and Networks
- Surface Wave Communications
- UAVs and Non-Terrestrial Networks
- Visible Light and Optical Communication

### ORGANIZING COMMITTEE

### **General Co-Chairs** Nordin Ramli, MIMOS, Malaysia

Hafizal Mohamad, Universiti Sains Islam Malaysia, Malaysia

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