

# IEEE WCNC® 2024

21–24 April 2024 // Dubai, United Arab Emirates

*Wireless Communications for Growing Opportunities*



**HUAWEI**

Platinum Patron



Platinum Patron



Destination Partner

# SUNDAY, 21 APRIL

		9:00	9:15	9:30	9:45	10:00	10:15			11:00	11:15	11:30	11:45	12:00	12:15			14:00	14:15	14:30	14:45	15:00	15:15			16:00	16:15	16:30	16:45	17:00	17:15
Grand Ballroom C&D Level 2	WS-10: Reconfigurable Intelligent and Holographic Surfaces for 6G																														
Meeting Room 6 Level 4	TUT-07: Near Field Terahertz Communications for 6G and Beyond																														
Meeting Room 5 Level 4	TUT-06: Next Generation Multiple Access																														
Meeting Room 4 Level 2	TUT-05: Recent Advances and Challenges in Vehicular Communication Network Security																														
Meeting Room 3 Level 2	TUT-04: Towards Future Ultra-Dense Low Earth Orbit Satellite Communication Systems																														
Meeting Room 9 Level 4	TUT-03: Security, Privacy and Anonymity in Emerging Applications in 6G and Beyond																														
Meeting Room 8 Level 4	TUT-02: Electromagnetic Signal and Information Theory																														
Ballroom F Level 4	TUT-01: 6G Waveform Options																														
Ballroom E Level 4	WS-12: 6GArch: The 3rd Workshop on 6G Architecture																														
Ballroom D Level 4	WS-09: Emerging Technologies for the Metaverse with 6G Massive/Immersive Communications																														
Ballroom C Level 4	WS-07: Integrated, Intelligent and Ubiquitous Connectivity for 6G Networks																														
Ballroom B Level 4	WS-04: Modern random access for massive connectivity in 6G																														
Ballroom A Level 4	WS-06: Beyond Connectivity: When Wireless Communications Meet Generative AI																														
Grand Ballroom B Level 2	WS-05: AutoML for Zero-touch Network and Service Management																														
Grand Ballroom A Level 2	WS-02: Delay-Doppler Communications, Sensing, and Their Integration																														
		10:30-11:00 • Networking Break, Level 2								12:30-14:00 • Boxed Lunch in Grand Ballroom C&D, Level 2								15:30-16:00 • Networking Break, Level 2								18:30-20:45 • Welcome Reception					
8:00-17:00 Registration																															

		9:00	9:15	9:30	9:45	10:00	10:15			11:00	11:15	11:30	11:45	12:00	12:15			14:00	14:15	14:30	14:45	15:00	15:15			16:00	16:15	16:30	16:45	17:00	17:15
Grand Ballroom C&D Level 2																															
Meeting Room 6 Level 4	ID-01: Invited Industry Talks Session 1																														
Meeting Room 5 Level 4	Tech Session Track 4-10 Antennas and Propagation																														
Meeting Room 4 Level 2	Tech Session Track 4-7 Positioning, Tracking and Sensing Techniques 1																														
Meeting Room 3 Level 2	Tech Session Track 4-4 RIS-Enhanced Communication Systems and Optimization																														
Meeting Room 9 Level 4	Tech Session Track 4-1 Intelligent Transportation and Connected Vehicles 1																														
Meeting Room 8 Level 4	Tech Session Track 3-3 Federated Learning III																														
Ballroom F Level 4	Tech Session Track 3-2 Federated Learning II																														
Ballroom E Level 4	Tech Session Track 3-1 Federated Learning I																														
Ballroom D Level 4	Tech Session Track 2-3 Resource Management																														
Ballroom C Level 4	Tech Session Track 2-2 AI in Mobile and Wireless Networks																														
Ballroom B Level 4	Tech Session Track 2-1 Mobile and Wireless Networks																														
Ballroom A Level 4	Tech Session Track 1-3 Integrated Sensing and Communication I																														
Grand Ballroom B Level 2	Tech Session Track 1-2 Wireless Power Transfer and Energy Harvesting																														
Grand Ballroom A Level 2	Tech Session Track 1-1 Intelligent Reflecting Surfaces I																														
		10:30-11:00 • Networking Break, Level 2								12:30-14:00 • Lunch in Grand Ballroom C&D, Level 2								15:30-16:00 • Networking Break, Level 2													
				Keynote 1 Theodore (Ted) S. Rappaport, New York University, USA				Keynote 2 Tommaso Melodia, Northeastern University, USA																							
8:00-17:00 Registration																															
10:00-17:15 Exhibition																															

## TUESDAY, 23 APRIL

TUESDAY, 23 APRIL																																											
	9:00	9:15	9:30	9:45	10:00	10:15		11:00	11:15	11:30	11:45	12:00	12:15		14:00	14:15	14:30	14:45	15:00	15:15		16:00	16:15	16:30	16:45	17:00	17:15																
Grand Ballroom C&D Level 2	Industry Session 2						10:30–11:00 • Networking Break in Exhibit Hall, Level 2	<b>Keynote 3</b> <b>Dr. Wen Tong, Huawei</b> <b>Grand Ballroom C&amp;D Level 2</b>						<b>Keynote 4</b> <b>Tara Javidi, University of California San Diego, USA</b> <b>Grand Ballroom C&amp;D Level 2</b>						12:30–14:00 • Lunch in Grand Ballroom C&D, Level 2						15:30–16:00 • Networking Break in Exhibit Hall, Level 2						Tech Session Track 1-23 Estimation and Detection											
Meeting Room 6 Level 4	Tech Session Track 4-24 Indoor Localization																															Tech Session Track 1-19 Antennas and Antenna Arrays						WCNC Steering Committee Meeting (Closed)					
Meeting Room 5 Level 4	Tech Session Track 4-23 Vision and Network Technologies																															Tech Session Track 3-15 Communication Systems V						Tech Session Track 4-22 AV Trajectory Tracking and Design					
Meeting Room 4 Level 2	Tech Session Track 4-20 Energy Efficiency and Green Communications																															Tech Session Track 4-21 UAV Communications and Control						Tech Session Track 4-19 Advanced Beamforming and Antenna Technologies 2					
Meeting Room 3 Level 2	Tech Session Track 4-17 Edge Computing, Edge Intelligence, and Fog Networks																															Tech Session Track 4-18 Advanced Beamforming and Antenna Technologies 1						Tech Session Track 4-16 Integrated Sensing and Communications 2					
Meeting Room 9 Level 4	Tech Session Track 3-12 Communication Systems II																															Tech Session Track 4-15 Integrated Sensing and Communications 1						Tech Session Track 4-14 Optical and Visible Light Systems					
Meeting Room 8 Level 4	Tech Session Track 3-11 Communication Systems I																															Tech Session Track 3-14 Communication Systems IV						Tech Session Track 3-17 Networks II					
Ballroom F Level 4	Tech Session Track 3-10 Generative Neural Networks																															Tech Session Track 3-13 Communication Systems III						Tech Session Track 3-16 Networks I					
Ballroom E Level 4	Tech Session Track 2-11 Privacy																															Tech Session Track 2-13 Delay Aware and Reliable Communications and Networks						Tech Session Track 2-16 Aerial and Satellite Communications and Networks					
Ballroom D Level 4	Tech Session Track 2-10 Reconfigurable Intelligent Surfaces																															Tech Session Track 2-12 Energy Efficient and Green Networking						Tech Session Track 2-15 IoT					
Ballroom C Level 4	Tech Session Track 1-15 Massive MIMO																															WICE/WIE Program						WICE/WIE Program					
Ballroom B Level 4	Tech Session Track 1-14 OTFS Systems																															PN-02: Energy Efficiency in Wireless Communications Networks, 5G to 6G Challenges and Opportunities						PN-03: Digital Twin-enabled Industrial Wireless Control					
Ballroom A Level 4	Tech Session Track 1-13 Coding and Coded Caching																															Tech Session Track 1-18 Wireless Channel Modeling						Tech Session Track 1-22 Modulation and Detection					
Grand Ballroom B Level 2	Tech Session Track 1-12 Integrated Sensing and Communication III																															Tech Session Track 1-17 Machine Learning for Communications						Tech Session Track 1-21 Wireless Security II					
Grand Ballroom A Level 2	Tech Session Track 1-11 Low-Latency Communications						Tech Session Track 1-16 Cell-Free Massive MIMO						Tech Session Track 1-20 Integrated Sensing and Communication IV																														
8:00–17:00 Registration																																											
10:00–17:15 Exhibition																																											

Reception 18:30–19:00 • Banquet 19:30–22:00

## WEDNESDAY, 24 APRIL

WEDNESDAY, 24 APRIL																																																
	9:00	9:15	9:30	9:45	10:00	10:15		11:00	11:15	11:30	11:45	12:00	12:15		14:00	14:15	14:30	14:45	15:00	15:15		16:00	16:15	16:30	16:45	17:00	17:15																					
Grand Ballroom C&D Level 2	10:30–11:00 • Networking Break in Exhibit Hall, Level 2						<b>Keynote 5</b> <b>Moeness Amin, Villanova University, USA</b> <b>Grand Ballroom C&amp;D Level 2</b>						<b>Keynote 6</b> <b>Mehdi Bennis, University of Oulu, Finland</b> <b>Grand Ballroom C&amp;D Level 2</b>						12:30–14:00 • Lunch in Grand Ballroom C&D, Level 2						15:30–16:00 • Networking Break in Exhibit Hall, Level 2						Tech Session Track 4-38 5G NR and Beyond																	
Meeting Room 6 Level 4																															Tech Session Track 4-37 Advanced Wireless Communication Systems						WS-08: 6G for Connected and Immersive Intelligence						WS-08: 6G for Connected and Immersive Intelligence					
Meeting Room 5 Level 4																															Tech Session Track 4-36 Network Optimization and Resource Allocation						WS-01: Optical Wireless Communications						WS-01: Optical Wireless Communications					
Meeting Room 4 Level 2																															Tech Session Track 4-35 Optimization and Security Protocols in IoT Networks						Tech Session Track 1-29 Recent Advances in Communication Theory						Tech Session Track 1-32 Channel Modeling and Measurement III					
Meeting Room 3 Level 2																															Tech Session Track 4-32 Learning in Communication Networks and Optimization						Tech Session Track 4-33 Quantum Communications and Advanced Wireless Technologies						Tech Session Track 4-34 Semantic Processing and Advanced Streaming Techniques					
Meeting Room 9 Level 4																															Tech Session Track 4-29 Channel Estimation and Modeling						Tech Session Track 4-30 Edge Computing and Microservice Management						Tech Session Track 4-31 Security and Privacy in Communication Networks					
Meeting Room 8 Level 4																															Tech Session Track 3-20 MIMO II						Tech Session Track 4-27 Satellite and Space Communications						Tech Session Track 4-28 LEO Satellite Networks					
Ballroom F Level 4																															Tech Session Track 3-19 MIMO I						Tech Session Track 4-25 802.11 and Next-Generation Wi-Fi Technologies 1						Tech Session Track 4-26 802.11 and Next-Generation Wi-Fi Technologies 2					
Ballroom E Level 4																															Tech Session Track 3-18 Networks III						Tech Session Track 3-22 UAV II						Tech Session Track 3-25 Optimization					
Ballroom D Level 4																															Tech Session Track 2-19 Scheduling and Performance Analysis of Networks						Tech Session Track 3-21 UAV I						Tech Session Track 3-24 Applications II					
Ballroom C Level 4																															Tech Session Track 2-17 Vehicular Networks						Tech Session Track 2-20 Federated Learning in Wireless Networks						Tech Session Track 3-23 Applications I					
Ballroom B Level 4																															Tech Session Track 2-14 Cognitive Radio Networks						PN-04: Towards Autonomous 6G Networks: Requirements, Standards, and Challenges						PN-05: Standardization and Industrialization for RIS: The Story for the Second Half					
Ballroom A Level 4																															Tech Session Track 1-26 Estimation and Localization						Tech Session Track 2-8 WiFi and WLAN, Cloud and Heterogeneous Networks						Tech Session Track 2-18 Modulation/Demodulation, MIMO/Massive MIMO, mmWave and VLC					
Grand Ballroom B Level 2																															Tech Session Track 1-25 Vehicular and UAV Communications						Tech Session Track 1-28 Channel Modeling and Measurement II						Tech Session Track 1-31 Intelligent Reflecting Surfaces III					
Grand Ballroom A Level 2	Tech Session Track 1-24 Beamforming and Beamfocusing						Tech Session Track 1-27 Channel Modeling and Measurement I						Tech Session Track 1-30 Intelligent Reflecting Surfaces II																																			
8:00–15:00 Registration																																																
10:00–17:15 Exhibition																																																

## ABOUT IEEE COMMUNICATIONS SOCIETY

IEEE Communications Society (ComSoc) is a leading technical and professional community with over 26,000 members worldwide. Founded in 1952, the Society evolved into a diverse group of global industry professionals with a common interest in advancing all Communications technologies. ComSoc members stay on top of the world of communications technology by accessing up-to-the minute technical information, networking with other experts in the field, and leveraging exclusive benefits.

To learn more, visit our website <https://wcnc2024.ieee-wcnc.org>

## Keynotes

All keynotes will take place in Grand Ballroom C&D, Level 2.

Monday 22 April • 11:00–12:30



Theodore (Ted) S. Rappaport  
New York University, USA



Tommaso Melodia  
Northeastern University, USA

Tuesday 23 April • 11:00–12:30



Dr. Wen Tong  
Huawei Wireless, CAN



Tara Javidi  
University of California San Diego, USA

Wednesday 24 April • 11:00–12:30



Moeness Amin  
Villanova University, USA



Mehdi Bennis  
University Of Oulu, FIN

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