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2024 IEEE Wireless Communications and Networking Conference Wireless Communications for Growing Opportunities

14–17 April 2024 // Dubai, United Arab

Call for Papers

The IEEE Wireless Communications and Networking Conference (WCNC) is one of the premier annual events of IEEE in the wireless research arena bringing together researchers, academics, industry, and government. WCNC 2024 will be held in the vibrant city of Dubai, United Arab Emirates (UAE), the capital of the Emirate of Dubai.

WCNC 2024 will include technical sessions, tutorials, workshops, and technology and business panels. You are invited to submit papers, and proposals for panels, tutorials, and workshops, in all areas of wireless communications, networks, services, and applications. The proposals for panels, tutorials, and workshops should be sent to the appropriate Chairs listed.

The submissions of technical papers should be made on EDAS in the following four tracks. Submissions should be in PDF and are limited to 6 pages, double column, 10-point font.

The technical program is organized in four technical tracks.

Visit Our Website

To learn more about WCNC 2024 in Dubai, and how to submit your paper, please visit:

https://wcnc2024.ieee-wcnc.org/

Important Dates:

Paper Submissions Deadline: Extended to 25 October 2023 (FIRM) Notification of Acceptance: 20 December 2023 Camera-Ready Papers: 12 January 2024

CALL FOR PAPERS

TRACK 1: PHYSICAL LAYER AND COMMUNICATION THEORY

Mark Flanagan, University College Dublin, IRL Daniel B. da Costa, Technology Innovation Institute, Abu Dhabi, UAE Domenico Ciuonzo, University of Naples "Federico II", IT Miaowen Wen, South China University of Technology, CN

Antennas and RF **Channel Modeling and Estimation** Coding Theory Energy Harvesting and Low Energy Communication Feedback and Two-Way Communication Free Space Optical Communication Fundamentals of Age of Information Holographic Surfaces and MIMO Information Theory and Channel Capacity Integrated Sensing and Communications Iterative Techniques, Detection, and Decoding Low Resolution Communication Millimeter-Wave and Terahertz Next Generation MIMO and Massive MIMO **Physical Layer Security** Propagation and Interference Modeling Relaying and Self-Backhauling Short Packet and Finite Block Length Communications Stochastic Geometry Waveforms and Modulation Wireless Power and Information Transfer

TRACK 2: MEDIUM ACCESS CONTROL AND NETWORKING

Yansha Deng, King's College London, UK Sinem Coleri, Koc University, TR Maurice Khabbaz, American University of Beirut, LEBN Valeria Loscri, INRIA, FR

Age and Value of Information for Networks **Backscatter Communications** Cognitive Radio and Networking **Cooperative Communications and Networking** Edge Computing, Edge Intelligence and Fog Networks **Energy-Efficient and Green Networking Multihop Networks** Multiple Access and Contention Network Economics **Network Slicing RAN Data Collection and Storage Enhancement Resource Management Routing and Congestion Control** Scheduling and Opportunistic Communications SDN/NFV Semantics of Information 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: RESOURCE ALLOCATION AND MACHINE LEARNING

Rui Zhang, National University of Singapore, SG Alessio Zappone, University of Cassino, IT Pierluigi Salvo Rossi, Norwegian University of Science and Technology, NO Xiangyun (Sean) Zhou, The Australian National University, AU

Bayesian Optimization for Wireless Communications Communication-inspired Machine Learning Convex and Non-Convex Optimization for Wireless Communications **Cross-Layer Optimization** 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 for Wireless Communications** Distributed Optimization & Resource Allocation for Wireless Communications End-to-end Machine Learning over Wireless Channels Game-Theoretic Approaches to Wireless Communications Implementation of Machine Learning Algorithms for Wireless Load Balancing and Cell/Band Association Model-Aided Machine Learning for Wireless Communications Networking Architectures for Artificial Intelligence Performance Analysis of Machine Learning Techniques for Wireless Communications **Reinforcement Learning for Wireless Communications** Resource Allocation for Wireless Communications and Networks 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

Vincenzo Sciancalepore, NEC Europe, DE Yuen Chau, Nanyang Technological University, SG Fan Liu, Southern University of Science and Technology, CN Giovanni Geraci, Pompeu Fabra University, ES

5G NR and 6G Standardization 802.11 and Next-Generation Wi-Fi Blockchain and Cryptography **Connected Vehicles** 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 Molecular and Nano Communications Networking support for virtual and augmented reality O-RAN Quantum Communications **Reconfigurable Intelligent Surfaces** 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

https://wcnc2024.ieee-wcnc.org/