Call for Papers – IEEE ICCET 2025

Theme: Intelligent Sensing and Communication for Wireless Networks

Due to the rapid growth of smart devices and emerging applications, it is desired to exploit various new functions and services into next generation wireless networks, *i.e.*, digital twins, autonomous driving, etc. Recently, integrated sensing and communication (ISAC) serves as a key enabler for 6G networks by seamlessly integrating communication and sensing functionalities within a unified framework. By leveraging shared resources, ISAC improves spectral efficiency, optimizes energy utilization, and creates new opportunities for advanced applications. Furthermore, with the advantages of achieving high-dimension analysis and sequential decision-making, the artificial intelligence (AI) technique, such as supervised/ unsupervised/reinforcement learning, becomes a promising method to reconstruct the physical world via environment sensing, and manage the multi-domain network resource to realize the dual functions of sensing and communication for wireless networks, especially concerning the heterogeneous and large-scale networks. Thus, it is highly desired to achieve intelligent sensing and communication for future wireless networks.

Topics of Interest
We welcome submissions that address, but are not limited to, the following areas:
- Information theoretic limits for ISAC
- Waveform design for ISAC
- Novel network architecture and protocols for ISAC
- Resource management for ISAC
- AI empowered sensing and communication networks
- Semantic communication networks
- Information timeliness for sensing and communication systems
- Security and privacy issues for intelligent sensing and communication systems

Submission Guidelines
Papers should present original interdisciplinary research work, practical innovations, or theoretical developments that address the challenges in multi-scale communication systems. Submissions must adhere to IEEE's standard conference template and should not exceed 9 pages in double-column format, including figures, tables, and references.

Track Chairs
Dr. Lei Zheng, Guangzhou University
Dr. Juanjuan Ren, Guangzhou University
Dr. Xiaolong Lan, Sichuan University