

INTERNATIONAL CONFERENCE ON UBIQUITOUS COMMUNICATION

U.com2023
www.ucom.org.cn

July 7-9, 2023 | XI'AN, CHINA

CALL FOR PAPERS



The future communication system will be a ubiquitous communication system integrating air, space, ground, and sea, which can not only effectively improve the key performance of the network, but also break the geographical limitation, realize global seamless three-dimensional coverage, support users' access anytime and anywhere, and narrow the digital divide between different regions. In addition, the emergence of new services and scenarios (such as immersive experiences, unmanned services, digital twins, etc.) and their increasingly demanding key performance indicators require ubiquitous communication systems to integrate communication, information, big data, AI, control, and other technologies, thereby supporting cloudified, flexible, minimalist, intelligent/secure endogenous and open networks, and providing the distributed, cross-domain, flexible and agile capability. Although ubiquitous communication systems have been discussed in both academia and industry in recent years, the research on its network architectures, theories, key technologies, and challenges is still in its infancy. For this reason, the School of Telecommunications Engineering of Xidian University initiates the International Conference on Ubiquitous Communication (Ucom), aiming to establish a broad communication platform to invite world-renowned experts and scholars to propose innovative insights, methodologies, architectures, theories, modeling approaches, and industry development visions for ubiquitous communication systems. This conference will result in high-quality academic papers to jointly promote the development of ubiquitous communication systems. The technical scope of the conference includes, but is not limited to, communication theory and techniques, signal processing and image processing, networking, optical communication, machine learning and optimization for wireless systems, and emerging technologies, standards and applications in the field of ubiquitous communications. All teaching, research staff, and students engaged in the new theory of communication technology and its applications are welcome to attend.

IMPORTANT DATES

Submission Due	Notification Due	Final Paper Due
05/05/2023	05/06/2023	25/06/2023

SUBMISSION SYSTEM

<https://easychair.org/conferences/?conf=ucom2023>

Workshop on Joint Communication, Sensing and Computing for Next Generation Network

The advanced joint communication, sensing and computing technology for next generation networks will revolutionize services in smart cities, intelligent transportation, intelligent manufacturing, smart homes, environmental monitoring, and other fields. The emerging applications in the next generation network share common features, including high-speed computing response, reliable wireless communication capability and robust, high-precision sensing performance.

By integrating communication, sensing and computing technology, the joint technology enables the sharing of spectrum, computation platform, and signal processing resulting in improved spectral, energy, and hardware efficiency of the system and obtaining integration gain. Furthermore, multiple assistance and gain of the three functions can further enhance their respective performance, thus obtaining cooperation gain.

This workshop aims to provide a forum for researchers and practitioners from academia and industry to promote joint communication, sensing and computing for next generation network. We welcome contributions include but not limited to:

- Joint communication, sensing and computing architecture design
- Performance analysis for joint communication, sensing and computing system or subsystems
- Performance optimization for joint communication, sensing and computing system or subsystems
- Distributed edge computing systems with communication and sensing ability
- AI for joint communication, sensing and computing system or subsystems
- Transmission modelling and signal processing for joint communication, sensing and computing system or subsystems
- Hardware design and simulation for joint communication, sensing and computing system or subsystems
- Big data collection and analysis for joint communication, sensing and computing system or subsystems
- Air-ground integration and vehicular system for joint communication, sensing and computing system or subsystems

Workshop chairs

Nan Wu, Beijing Institute of Technology, China

Haijun Zhang, University of Science and Technology Beijing, China

Liping Qian, Zhejiang University of Technology, China

TPC chairs

Yongjun Xu, Chongqing University of Posts and Telecommunications, China

Chao Ren, University of Science and Technology Beijing, China

Biao Pan, Beihang University, China



ORGANIZERS



CO-ORGANIZERS



SUPPORTED BY



CONTACT US

Conference secretary: Vicky Li
Tel: +86 19182240053
Email: ucom@xidian.edu.cn