

## Call for Papers

### Recent Advances in Intelligent Network Computing (INC) Workshop

The 20<sup>th</sup> International Conference on Wireless Communications and Mobile Computing

Website: <http://iwcmc.org/2024/>

Submission Link: <https://edas.info/newPaper.php?c=31520&track=120322>

May 27-31, 2024, Cyprus

### Chairs

Mohamed Cheriet,	École de Technologie Supérieure, Canada
Zhenjiang Zhang,	Beijing Jiaotong University, China
Bo Rong,	Communications Research Centre, Canada
Peng Yu,	Beijing University of Posts and Telecommunications, China

### Scope

The landscape of Intelligent Network Computing (INC) is rapidly evolving, driven by the integration of sophisticated computational techniques and advanced networking. INC leverages artificial intelligence (AI), big data, and cloud computing to create networks that are self-learning, adaptive, and capable of handling complex automation tasks. Key developments within INC include AI-enhanced network management, machine learning for traffic management, and optimized resources for edge computing environments. INC's innovative approaches improve IoT efficiency, facilitating the massive data exchange from a myriad of connected devices. INC also employs big data analytics to provide deeper insights into network operations, fostering data-driven decision making and user-specific services. In this workshop, experts from academia and various industry sectors will explore the opportunities presented by the latest INC advancements, focusing on smart network infrastructure and intelligent services.

### Topics

Accepted papers will be published in the IEEE IWCMC 2024 proceedings and will be submitted to the IEEE digital library (IEEE Xplore). Authors are welcome to submit original papers (not published before and/or simultaneously to another venue) with topics that include but are **not limited to**:

- Data driven intelligence supported approaches and technologies
- Quality of Service (QoS) and Quality of Experience (QoE) support
- Advanced AI-driven trends for autonomous communication networks
- Intelligent communications and networking for computing
- Network fault detection and self-healing
- Network self-configuration and self-organization
- Next generation network architecture for intelligent computing
- AI-based edge computing

- Machine learning paradigms for intelligent traffic engineering
- Data-driven decision making: AI models and frameworks in INC
- Intelligent services and user-centric networking in INC
- Automated Machine Learning (AutoML) for zero-touch service and network management
- Adaptive machine learning techniques for real-time network management
- Adaptive machine learning for fast evolving network and communications
- Bayesian optimization for self-healing networks
- Data-driven approaches for data fusion in 6G
- Data-driven solutions for joint communication and sensing (JCS)
- Large Language Models (LLM) for wireless communications and sensing
- Large Language Models (LLM) for network management and optimization
- Telecom-domain open datasets

Submitted papers are encouraged to address novel technical challenges or industrial and standard aspects of the key technologies for sustainable and secure cognitive buildings/cities.

## **Important Dates**

**All deadlines are the same as those of the main conference.**