

# Call for Papers

## Advanced AI for Future Mobile Networks and Communication Systems Workshop (AI-NECOS)

*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=31475>

**May 27-31, 2024, Cyprus**

### Chairs:

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### Scope

AI and machine learning (ML) are becoming increasingly prevalent in future mobile networks and communication systems, such as 5G and 6G. The vision of AI-empowered networks is taking shape as new use cases emerge, particularly in areas like the metaverse, autonomous systems, the Internet of Things (IoT), and user-centric applications. Emerging deep learning methods like transfer learning, federated learning, and large language models (LLM), can play a crucial role in optimizing network design and operation. They can also facilitate the generation of personalized services and the deployment of efficient network platforms for operators. In this workshop, experts from academia and various industry sectors will explore the opportunities presented by the latest AI techniques. They will also discuss the challenges that arise from integrating AI into the design and operations of next-generation networks and communication systems.

### 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:

- AI/ML-based optimization techniques for mobile networks
- Generative AI for network use cases
- Native AI for personalized service generation
- Pushing LLM to 6G Edge
- Distributed AI at the Edge, Quantized Edge Inference
- Network Software Infrastructure & MLOps
- AI-assisted privacy-preserving, network security, privacy, and trust management
- Predictive analytics using AI techniques
- AI models for resource management and network performance
- AI models for traffic engineering, network planning, and capacity optimization
- AI-driven network security and privacy solutions
- AI-empowered 6G massive radio access, spectrum management, and beamforming

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**

Please check the main website!

Note: Within this workshop there will be one Best Paper Award.