# **Call for Papers**

# Revolutionizing Emerging Networks and Systems with Large Language Models (ENS\_LLMs) Workshop

*The 21<sup>st</sup> International Conference on Wireless Communications and Mobile Computing* Website: http://iwcmc.org/2025/

> Submission Link: https://edas.info/newPaper.php?c=32919 Technically sponsored by IEEE and IEEE UAE Section May 12-16, 2025, Abu Dhabi, UAE

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## Scope:

This workshop explores the transformative applications of Large Language Models (LLMs) in advancing emerging systems and networks. Participants will gain insights into the latest advancements in LLMs and their integration into innovative technologies, enabling efficient, adaptive, and intelligent systems across various domains. The workshop will feature a set of research papers presenting cutting-edge research and groundbreaking solutions in LLM-driven systems and networks, including but not limited to communication, energy efficiency, resource optimization, security, and automation. While sustainability remains a key theme, the workshop will also delve into broader challenges and opportunities that LLMs bring to emerging systems and network technologies.

Designed for researchers, professionals, and practitioners, the workshop will showcase how advanced AI techniques, particularly LLMs, reshape the network and system landscape. It fosters collaboration and knowledge sharing, opening new horizons for developing intelligent, sustainable, and adaptive technologies. This event will define the future direction of LLM applications, making their use in emerging systems and networks both practical and impactful.

# **Topics:**

Accepted papers will be published in the IEEE IWCMC 2025 proceedings and will be submitted to the IEEE digital library (IEEE Xplore). Authors are welcome to submit original papers (not published before or submitted simultaneously to another venue) with topics that include but are not limited to:

- Network Congestion Prediction using LLMs
- Proactive Network Management using LLMs
- Efficient Source and channel coding Solutions-based on LLMs
- LLMs for Optimizing Network Resource Allocation
- Enhancing Energy Efficiency in Communication Networks with LLMs
- LLMs for Anomaly Detection in Network Traffic
- LLM Defense Mechanisms Against Energy Inefficiency
- Enhancing Multimedia Communications with LLMs
- Enhancing Sustainability in IoT Communications with LLMs
- Automating Green Communication Protocols with LLMs
- LLMs for Sustainable Network Management
- LLMs in Renewable Energy Communication Systems
- Edge Intelligence based on lightweight LLMs
- LLMs in Green Wireless Communication Systems
- Ethical Considerations and Challenges in using LLMs for Sustainable Communications
- Federated Learning with LLMs for Green Communications
- Securing Sustainable Communication Systems with LLMs
- Cyberattack detection and identification-based on LLMs
- Case Studies and Practical Applications of LLMs in Telecom
- Future Trends and Directions in LLMs for sustainable and green Communications
- Challenges in Applying LLMs to Green and Sustainable Communications
- Security and Privacy-Preserving of LLM implementation
- Adversarial Robustness of LLMs in Sustainable Communications
- Autonomous Green Network Evolution via LLMs
- Data-Driven Decision Support for Network Operators Using LLMs
- LLMs for Predictive Maintenance in Communication Infrastructure
- Distributed LLM Architectures for Resource-Constrained Environments
- LLM-Assisted Fault Detection & Diagnosis in Complex Network Infrastructures.

Submitted papers are encouraged to address novel technical challenges or industrial and standard aspects of key technologies for sustainable and green communication solutions using LLMs.

### **Important Dates**

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

<u>Note</u>: Within this Workshop, there will be one Best Paper Award.