

## Call for Papers

### Track 10 – AI/ML FOR COMMUNICATIONS AND NETWORKING

#### Track Chairs:

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#### Scope and Motivation:

Networks are becoming increasingly complex to the level where traditional parameter tuning approaches and human operator-based decision mechanisms are proving to be insufficient. On the other hand, the abundance of data from networks, new hardware with huge processing capabilities and advanced machine learning algorithms are creating new opportunities for data-driven decisions. In addition, novel and more sophisticated applications that exploit the value of data and knowledge extraction ability of AI/ML are emerging in this space, fostering research at the intersection of networking and data science. New computing and communication paradigms for decentralized and constrained systems are thus emerging, leading to pervasive intelligent ecosystems. Empowered by the rise of advanced AI/ML techniques, intelligent decisions based on sensing data significantly improve the application performance and give rise to a large number of innovative applications and intelligent services, which enables better flexibility and robustness in design and deployment of communication systems and networks. In this context, this track invites original contributions in the area of AI/ML for Communications and Networking.

#### Main Topics of Interest:

Topics of interest include but are not limited to the following:

- AI/ML for radio resource management;
- AI-enabled RAN optimization;
- AI/ML for telecom infrastructure optimization;
- AI-enabled for Multi-Access Edge Computing (MEC);
- Advances in AI for signal processing;
- AI/ML for channel estimation and channel prediction;
- AI/ML for multiple access;
- Network slicing using AI/ML;
- AI/ML for sensor data mining;
- AI/ML for wireless localization;
- AI/ML for routing and management of wireless and sensor networks;
- AI/ML for anomaly detection in wireless and sensor networks;
- Distributed and federated learning in wireless and sensor networks;
- Transfer learning and meta learning in wireless and sensor networks;
- IoT in-network computation using AI/ML;
- AI/ML driven crowdsensing;
- AI/ML for airborne wireless communications;
- AI/ML for end-to-end wireless communications;
- Novel wireless applications enabled by deep learning.