Call for Papers Track 10 – AI/ML IN WIRELESS SENSING, COMMUNICATION AND APPLICATIONS

Track Chairs:

Paul Patras, University of Edinburgh, UK

Scope and Motivation:

As the number of Internet-connected devices continues to expand and the volume of data they generate and consume grows sharply, deep neural networks become increasingly attractive in addressing the analysis and management of wireless sensing and communications systems. 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 wireless networking and data science. New computing and communication paradigms for decentralized and constrained systems are thus emerging, leading to pervasive intelligent ecosystems. In this context, this track invites original contributions in the area of AI/ML in Wireless Sensing, Communication and Application.

Main Topics of Interest:

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

- AI/ML for radio resource scheduling;
- Advances in AI for signal processing;
- AI/ML for sensor data mining;
- AI/ML for wireless localization;
- AI/ML for environment monitoring;
- 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;
- IoT in-network computation using AI/ML;
- AI/ML driven crowdsensing;
- AI/ML for airborne wireless communications;
- Systems and algorithms for ML tailored to wireless embedded devices;
- Novel wireless applications enabled by deep learning.