Special Issue

Machine Learning and Big Data Analytics for the Internet of Things and Wireless Sensor Networks

Message from the Guest Editors

The use of Machine Learning (ML) techniques has been highlighted as a promising approach for processing IoT data and optimizing resource utilization in wireless sensor networks (WSNs) and represents one of the most advanced analytical techniques currently in use. The IoT and WSNs generate a large volume of data from various sources such as environmental sensors, smart appliances, industrial equipment, and wearable devices. ML algorithms help to process and analyze these data in order to extract meaningful insights, detect patterns, and make predictions. The topics of interest within this Special Issue include, but are not limited to:

- Predictive maintenance;
- Anomaly detection;
- Sensor fusion;
- Energy optimization;
- Tiny Machine Learning;
- Data-driven model optimization;
- Model pruning, quantization, and compression;
- Interpretation and decision-making;
- Smart cities and urban analytics;
- Security and Privacy.

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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