Special Issue

Tiny Machine Learning-Based Time Series Processing

Message from the Guest Editors

Time series data, which comprise sequences of observations collected over time by various types of sensors, hold a huge value across several application domains. In this Special Issue, we aim to investigate the latest developments in the area of time series processing based on TinyML. Topics of interest include, but are not limited to, the following:

- Enhancing sensors with TinyML;
- Energy-efficient circuits and system architectures for time series TinyML;
- Real-time time series applications on resource-limited devices;
- Software/hardware co-design for efficient low-power embedded systems;
- TinyML-based processing for time series forecasting, classification, anomaly detection;
- Performance and system assessment in TinyML time series processing for field deployment;
- Energy harvesting and power management in embedded time series processing;
- Quantization/compression methods for efficient embedded deployment;
- Binary models for time series processing;
- Neural architecture search (NAS) methods for embedded time series processing;
- Explainability of time series

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Message from the Editor-in-Chief

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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