Special Issue

Exploring Sensor Data Fusion in IoT with Advanced AI Techniques

Message from the Guest Editors

This Special Issue aims to showcase research in AI applications for IoT sensors, focusing on Software-Defined Networking (SDN), fog, and edge computing. We seek contributions focusing on novel architectures, protocols, algorithms, and security frameworks to meet the unique needs of IoT ecosystems. Topics of interest include, but are not limited to, the following:

- Integration and optimization of sensor networks in AI-powered IoT systems;
- Real-time data processing and analytics in IoT applications using parallel computing techniques;
- AI-enhanced sensor data fusion and interpretation in IoT environments;
- Development of AI algorithms tailored for IoT and sensor environments;
- Design of IoT architectures leveraging AI and software-defined networking;
- Novel parallel programming models for fog, edge, and cloud computing in the IoT;
- Implementation of scientific programming models for interactions among the IoT, sensors, and edge applications;
- Protocols enabling efficient edge-cloud interactions and parallel programming for the IoT;
- IoT resource management with a focus on privacy, trust, and security;
- Multisensor data fusion and multimodal machine learning.

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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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