

Special Issue

Trusted and Secure Edge Intelligence for Large AI Models in IoT Sensor Networks

Message from the Guest Editors

This Special Issue seeks to showcase the latest research in **trusted and secure edge intelligence for IoT, powered by large AI models**. We invite submissions on novel architectures, algorithms, and applications that integrate intelligent sensing with secure and trustworthy AI deployment at the edge. Potential topics include, but are not limited to:

- Secure and trusted edge architectures for IoT sensor networks;
- Deployment and optimization of large AI models in edge-IoT systems;
- Privacy-preserving learning for sensor data (federated learning, homomorphic encryption, differential privacy);
- Adversarial machine learning and defense strategies in IoT sensing environments;
- Blockchain and decentralized trust for IoT and edge intelligence;
- Lightweight compression, distillation, and adaptation of large AI models for sensor networks;
- Trustworthy and explainable AI for IoT sensing applications;
- Secure orchestration of edge-cloud resources for large AI models;
- Industrial and mission-critical applications: smart healthcare, precision agriculture, industrial IoT, autonomous systems, energy grids, smart cities.

Guest Editors

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Deadline for manuscript submissions

31 May 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/254677

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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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