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Applications of Resource Efficient Machine Learning in Smart Sensors

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Message from the Guest Editors

Dear Colleagues,

In cloud-based machine learning (ML) applications, inference and learning occur in the cloud. However, due to a growing number of more powerful edge devices, together with certain privacy concerns and low latency requirements, there is a movement to transfer the information and part of the learning to areas near the sensors. Since sensors also increasingly include local processing capabilities, a part of the information can even shift to the sensors themselves. Such smart sensors will process all raw data locally and only transmit meaningful results. This trend is supported by the increase in offerings of commercially available ML processing cores, with different performance levels for various applications, including small devices such as for IoT and even dedicated processors designed for battery-powered operation.

This Special Issue aims to gather the latest results pertaining to novel, resource-efficient ML algorithms used in smart sensors for smart city, healthcare, industry 4.0, precision farming, and smart transportation applications.



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Special Issue



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Message from the Editor-in-Chief

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