Applications of Artificial Intelligence in the IoT

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Message from the Guest Editors

Integration of AI with IoT systems enables us to collect, analyze, and act on data in real-time. Deploying advanced machine learning (ML) algorithms with the large amount of data collected by IoT devices enables advanced decision-making and automation. An AI application may analyze data from IoT devices, learn from it, and continuously refine its models. This continuous learning cycle makes the entire system smarter over time. However, AI/ML deployment in IoT systems is an open research problem due to several implications, including the resource limitations of IoT devices and security considerations.

Leveraging AI for data analysis, monitoring, and modelling in IoT systems is challenging. This is due not only to the limitation of IoT storage, processing power, and energy but also the real-time requirements of most intelligent IoT applications. Moreover, there are new security challenges to protect data, considering machine learning complexities and limited resources for supporting data encryption.

This Special Issue aims to publish papers on the latest advancements and the prevailing challenges within the realm of AI applications in IoT systems.

Special Issue

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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