Special Issue

Application of AI, Sensors, and IoT in Modern Agriculture

Message from the Guest Editor

Achieving a proportional increase in agricultural production to feed this growing population is one of humanity's most pressing challenges, and this goal must be pursued against a backdrop of climate change, resource depletion, and increasingly frequent extreme weather events, all of which threaten the stability of global food systems. To address these challenges, the integration of advanced technologies, such as automation, sensors, yield monitors, the Internet of Things (IoT), drones, and robotics, is essential, and these tools, combined with geographic information systems (GISs), artificial intelligence (AI), highly structured mathematical models, and big data analytics, form the foundation of a global "Digital Twin" for agriculture. Spatial analysis of agricultural data plays a pivotal role in this context, allowing for precise decision-making and resource optimization. This Special Issue, which presents some of the most recent advances and novel approaches in the spatial analysis of agricultural data, is intended for a wide and multidisciplinary audience.

Guest Editor

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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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