Special Issue

Artificial Intelligence Applications in Precision Agriculture

Message from the Guest Editors

Precision Agriculture (PA) has been transforming agricultural production by introducing more advanced methods for collecting, analyzing, and interpreting data to better understand field variability. In this context, Artificial Intelligence (AI) plays a pivotal role by enhancing each stage of the process, enabling more accurate, efficient, and representative data collection, analysis, and decision making. Notably, AI facilitates real-time decision making, addressing one of the key challenges in PA. Consequently, this Special Issue aims to highlight recent innovations in AI-driven applications within precision agriculture. Topics of interest include, but are not limited to, machine learning, deep learning, natural language processing (NLP), and the integration of the Internet of Things (IoT) with AI systems. We also welcome contributions that explore the integration of cutting-edge technologies such as unmanned aerial vehicles (UAVs), robotics, hand-held sensors, satellite systems, and imaging technologies.

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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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