



agriculture



Special Issue Reprint

Application of Vision Technology and Artificial Intelligence in Smart Farming

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Artificial intelligence (AI) has been gaining traction in smart agriculture. Machine learning (ML) can be used for environmental and production performance data analysis and prediction, and computer vision (CV) can monitor abnormal phenotypes in plants and animals. They have massive potential to enhance the overall functioning of smart farming and reduce manual labor. This Special Issue focuses on the novel application of ML and CV in smart farming. The content of this Special Issue encompasses the use of various AI models for the in-depth analysis of quantitative data, RGB images, remote sensing images, and 3D point cloud data, thereby completing tasks such as environmental and growth state prediction, target recognition, and early disease diagnosis, improving crop growth performance and animal welfare.



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