

Special Issue

Application of Vision Technology and Artificial Intelligence in Smart Farming

Message from the Guest Editors

From reducing production costs with intelligent automation to boosting productivity, Computer vision (CV) and artificial intelligence (AI) have massive potential to enhance the overall functioning of smart farming. Based on CV and AI, monitoring and analyzing specific behaviors of livestock and poultry in large-scale farms can improve our knowledge of intensively raised livestock and poultry behaviors in relation to modern management techniques. CV approaches are required to extract plant phenotypes from images and automate the detection of plants and plant organs. AI approaches give growers weapons against pests. The application of CV and AI helps crops to progress toward perfect ripeness.

This Special Issue focuses on the application of CV and AI in smart farming. Topics of interest include but are not limited to the following: design and optimization of agricultural sensors, behavior recognition of livestock and poultry, automation technology in agricultural equipment, design and optimization of robots for livestock and poultry breeding, non-destructive detection of meat quality, and agricultural big data analytics. Original research articles and reviews are welcome.

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Message from the Editor-in-Chief

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