

Special Issue

Applications of Computer Vision in Agriculture

Message from the Guest Editors

This Special Issue focuses on practical developments that bridge research innovation and real-world adoption. The scope covers imaging and sensing platforms, core vision tasks, and integration with agricultural machinery and robotics. We welcome papers that emphasize reproducible pipelines, well-designed field experiments, and evaluation protocols that reflect operational constraints and generalization across cultivars, locations, and seasons. We encourage studies that demonstrate how vision outputs can be used to drive practical operations. We also welcome work that tackles the realities that determine field usability, including data efficiency and adaptability across seasons and cultivars (annotation strategy, semi-/self-supervised learning, domain adaptation), uncertainty-aware predictions that support risk-sensitive decisions, and deployment constraints such as latency, robustness, and maintainability on embedded platforms. This Special Issue aims to accelerate the development of reliable, scalable vision tools that measurably improve efficiency, sustainability, and resilience in precision agriculture.

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About the Journal

Message from the Editor-in-Chief

AgriEngineering (ISSN 2624-7402) is an international open access, open-source, and cross-disciplinary scientific journal on the engineering science of agricultural and horticultural production. Our aim is to encourage scientists to publish their experimental and theoretical research, along with the full set of schematics, source-code, and mechanical design models leading to accelerated and rapid dissemination of leading-edge technologies emerging in agricultural, environmental, and agronomic engineering. *AgriEngineering* publishes articles, technical notes, reviews, commentaries, and case/field reports, as well as Special Issues on particular subjects.

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