

Special Issue

Recent Advances in Computer Vision Technology and Its Agricultural Application

Message from the Guest Editors

This research topic relates to several computer vision applications in industrial and agricultural fields, mainly autonomous driving, surface defect detection, object detection and localization, automatic harvesting robotics, plant phenotyping, and crop yield estimation.

Topics of interest include (but are not limited to):

- Computer vision-based autonomous driving algorithms that can robustly detect pedestrians, lane lines, and other targets.
- Generalizable, real-time surface defect detection methods.
- End-to-end, real-time, deep neural networks that can detect and locate objects simultaneously.
- Fruit/vegetable detection and localization for automatic harvesting robots, specifically end-to-end, real-time, and precise deep neural networks that can detect target produce in fields.
- Generalizable methods for segmenting or reconstructing plant parts to support plant phenotyping processes.
- Crop yield estimation.

We look forward to receiving your contributions.

Guest Editors

Prof. Dr. Xiangjun Zou

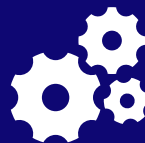
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Deadline for manuscript submissions

closed (30 September 2022)



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Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided. There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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