

## Review of: "Comparing YOLOv8 and Mask RCNN for object segmentation in complex orchard environments"

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Potential competing interests: No potential competing interests to declare.

I commend the authors for their research. My comments are below;

- 1. Section 1: From the paper, the primary goal of this study is to systematically compare and evaluate the performance of these two models (YOLOv8 and Mask R-CNN) for instance segmentation tasks in modern, commercial apple orchards. Through this comprehensive comparison, this research aims to provide insights into the suitability, efficiency, and potential challenges associated with implementing each model in agricultural automation applications. COMMENT: Looking at Table 1, which already highlights the successes and widespread application of both instance segmentation techniques, can you justify the need to make a comparison of these techniques? Why is it necessary to perform this study? I don't seem to understand why.
- 2. Section 3.4: Performance evaluation You need to critically explain the breakdown of the procedure for your performance evaluation. It's looking vague and not properly explained.
- 3. English language and grammar corrections are needed to clearly comprehend the structure and flow of the paper. Sentences are incoherent and poorly structured.

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