

# 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.

Dear Editor,

I am writing to you regarding the review of the article "Comparing YOLOv8 and Mask RCNN for object segmentation in complex orchard environments". Upon detailed evaluation, I find the article well-structured and of high quality, recommending its publication subject to minor revisions to enhance its impact.

In the introduction, I suggest expanding on the motivations and practical applications of comparing these models. Additionally, it would be beneficial to include references to research on running these models on embedded devices, increasing their portability and real-world applicability.

Regarding materials and methods, it is crucial to detail the data set sizes and handling methodology. This will provide greater clarity and enable better study replication.

For results and discussion, I recommend adding visual examples of the segmentation process, including results from the hidden layers of both architectures. This would offer deeper insights into the models' performance. Moreover, including details about lighting conditions and data collection times would assess the models' real-world applicability.

Finally, I suggest addressing preprocessing and postprocessing times in the inference speed and frames per second (fps) analysis, as this directly impacts the practical use of the obtained results. It would also be valuable to discuss the study's current limitations and suggest areas for future research.

I hope these comments contribute to the article's enrichment and its successful publication in your esteemed journal.

Sincerely,

Segundo Francisco Segura Altamirano  
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