

I hope you are doing well. I extend my sincere appreciation for providing me with the opportunity to revise the manuscript titled "Pavement defect detection algorithm SSC-YOLO for fusing multiscale spatial channels in YOLOv8", which was submitted to the Journal of "PeerJ". While the manuscript contains intriguing information, several modifications and clarifications require attention. I have outlined these issues below for your consideration.

Considerations:

- A. Please provide a detailed description of the pre-processing steps, accompanied by a diagram illustrating the process.
- B. Please describe how you prepared the dataset, including the methods used for splitting the data into training, test, and validation sets. If random sampling was employed, specify whether techniques like K-Fold or Monte Carlo cross-validation were utilized to enhance the reliability of the results.
- C. The interconnections between elements within the proposed model are unclear. Please provide a detailed explanation of how these elements connect and interact.
- D. To enhance clarity, please provide a comprehensive table summarizing the elements employed in the model implementation, along with their characteristics and functionalities.
- E. Highlight the specific optimizations or improvements introduced in this iteration of the model compared to previous versions.
- F. A detailed description of the hyperparameters used in the proposed model is crucial for reproducibility. Elaborate on the chosen hyperparameter values, including any experimental settings or tuning methodologies employed.

The work seems interesting and the technical contributions are solid. I believe this paper shows great potential, and with some "Minor" revisions and addressing the comments, it will be ready for publication. I am eagerly looking forward to reviewing the revised paper. However, I hope that the findings of this paper will be useful for the audience of this journal and the investigated region.

Good Luck!