

This article introduces the deep learning algorithm based on machine learning to detect circuit defects in optical sensing systems, which is a topic of interest for researchers in related fields. This article focuses on circuit defect recognition and proposes a detection algorithm based on YOLOv8. The author describes the implementation process of the algorithm and trains and verifies the model on the dataset. The test results are analyzed, and the experimental design is reasonable, with reliable conclusions. I suggest accepting this article with minor modifications.

- 1.The introduction of the experimental dataset is not clear enough. What is the reason for choosing this dataset over other datasets.
- 2.Insufficient introduction to the internal relationship between optical sensing and defect detection, specific descriptions can be attempted.
- 3.What are the advantages of YOLO model compared to other models and the main reasons for choosing this model in this article.