

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_122434
Title of the Manuscript:	Research on Small Object Detection Algorithm Based on Improved YOLOv5
Type of the Article	Original Research Article

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of „**Jack of Novelty**“, provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

<u>Compulsory</u> REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	This manuscript presents significant advancements in the field of small object detection, addressing a critical challenge in computer vision, particularly within autonomous driving scenarios. By integrating the CBAM attention mechanism and optimizing the loss function with EIoU, the authors have effectively enhanced the YOLOv5 algorithm's feature extraction capabilities, leading to marked improvements in detection accuracy and recall rates. The research is	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes, the title was suitable for the article.	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Yes	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	This manuscript is scientifically robust and technically sound, as it addresses specific limitations of the YOLOv5s algorithm through well-founded improvements. The addition of a small object detection head is a logical enhancement that effectively tackles the challenge of detecting small and occluded objects, a well-known issue in object detection tasks. The integration of the CBAM attention mechanism into the C3 module is a thoughtful approach to improving feature representation, thereby reducing the likelihood of missed and false detections. Furthermore, the introduction of the EIoU loss function demonstrates a deep understanding of the	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. -	Yes, the references used for the manuscript was recent, proper and sufficient for the article.	
<u>Minor</u> REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?	Yes	
<u>Optional/General</u> comments		

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PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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