

REVIEWER'S REPORT

Manuscript No.: JNCS -080

Title: COMPUTER VISION FOR INTELLIGENT OBJECT DETECTION: MODELS, APPLICATIONS, AND CHALLENGES

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		—		
Techn. Quality			—	
Clarity		—		
Significance	—			

Reviewer Id: JPR-200

Reviewer's Comment for Publication.

The manuscript provides a relevant and well-structured review of intelligent object detection, covering fundamental concepts, evaluation metrics, major architectures such as Faster R-CNN, YOLO, SSD, and DETR, as well as their applications in transportation, healthcare, agriculture, industrial inspection, robotics, and smart-city infrastructure. The paper appropriately discusses important practical challenges, including small-object detection, occlusion, environmental variations, computational complexity, data quality, domain shift, explainability, privacy, and fairness. The comparative discussion of two-stage, one-stage, and transformer-based detection approaches is informative; however, the review methodology could be strengthened by providing clearer details about the literature search strategy, selection criteria, publication period, and inclusion/exclusion process. A more critical comparison of recent object-detection models, supported by quantitative results from existing studies where appropriate, would further improve the technical depth of the review. Minor improvements in language, formatting, and citation consistency are also recommended. Overall, the manuscript is informative, relevant to current computer-vision research, and suitable for publication after minor revision.