

Review of: "An Intelligent Analytics for People Detection Using Deep Learning"

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Potential competing interests: No potential competing interests to declare.

Paper Title: An Intelligent Analytics for People Detection Using Deep Learning.

The study proposed deep learning techniques for detecting human behavior using attributes such as body language, surrounding events and objects, and body posture. Three deep learning models were evaluated: CNN, YOLO, and Faster R-CNN. An empirical analysis was conducted to identify the model with the best performance in terms of accuracy, speed, and complexity.

Issue 1: Section 1 (Introduction) lacks clarity and a logical flow. The author did not present essential information needed to guide the reader through the study. The following key elements are missing from the introduction:

- A clear definition of the problem being addressed by the study.
- A clear statement of the study's objectives.
- A description of the unique contributions of the study.

Issue 2

Figure 1 does not include any module representing a Convolutional Neural Network. The author needs to revise the figure and clearly indicate the position of the Convolutional Neural Network.

Subsection 1.2 provides insufficient information about Convolutional Neural Networks; the author needs to expand on the topic to enhance understanding and improve the presentation. Additionally, the correct abbreviation for Artificial Intelligence should be provided to correct the typo.

Subsection 1.3 presents a contradiction: while the author begins with the subtopic "Advantages of deep learning for people detection," the first statement, "Despite the advantages of people detection, there are its drawbacks such as:" contradicts both the subtopic and the points presented

Issue 3:

Section 2 (Literature Review) does not meet the expected standards. The author is expected to present relevant related studies from the literature that have focused on people detection, highlighting their achievements and limitations. A comprehensive literature review will help the author identify research gaps and avoid duplicating existing work.

Issue 4: Section 3 (Method: Applying Deep Learning Models for People Detection)

The author presented what appear to be experiments rather than a discussion of methods. In this section, the author is expected to provide details about the models' architecture and how they are integrated into the study. It would be beneficial for the author to revisit each of the proposed models and discuss their operations in relation to the task at hand.

Issue 5: (other Issues in Section 3)

- The author mentioned two different ConvNets but did not specify which of them was employed in the study
- The CNN is pre-trained on what dataset?
- Section 3.3 should be converted to a paragraph since it is the continuation of section 3.2

Issue 6:

The author presented a summary of the models' performance based on three metrics (Accuracy, Speed, and Complexity) in Table 1. However, the values provided are not appropriate for comparing the models. Accuracy should be measured as a percentage, while speed should be evaluated based on execution time, and complexity should be analyzed using Big O notation for proper model analysis.

Issue 7: (other issues in section 4)

- The results presentation needs more clarification and detailed explanation, especially figure 6.
- Fig 5a, 6a, and 6b are not mentioned in the text.