

# Review of: "Academic Performance Prediction Based on Convolutional Neural Networks and IRT Parameters as RGB Images"

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Potential competing interests: No potential competing interests to declare.

## .1. Abstract and Introduction:

-Abstract Clarity: The abstract, while detailed, lacks a clear problem statement and specific contributions. It would benefit from a more structured presentation that highlights the study's unique aspects and significance.

-Introduction Gaps: The introduction needs to identify the specific gaps in the existing literature that the paper addresses. It provides a broad overview but could be more focused on the particular problem and objectives of the research.

## 2. Literature Review:

- Information Density: The related work section could be more dense and might overwhelm readers. A synthesized summary of the limitations of existing methods and a clear explanation of how the proposed method overcomes these limitations would improve readability.

## 3. Methodology:

-Technical Complexity: The methodology section is highly technical and may not be accessible to all readers. Including more intuitive explanations, diagrams, or flowcharts could enhance understanding.

- Dataset Justification: The rationale for choosing the dataset over other datasets must be thoroughly discussed. Comparing it with other datasets would strengthen the justification.

## 4. Results and Discussion:

- Lack of Qualitative Results: The results section lacks qualitative examples, such as visualizations of detected vehicles, which would help illustrate the practical application and effectiveness of the model.

- Dataset and Model Limitations: The potential biases in the dataset and the challenges or limitations faced during the implementation of the algorithm are not discussed extensively. Addressing these would provide a more balanced view of the study's findings.

## 5. Conclusion:

- Detailed Implications and Future Work: The conclusion should include a more detailed discussion on the practical

implications of the results, limitations of the study, and suggestions for future research directions.

#### 6. References:

- Current and Relevant References: Ensure all references are current and relevant. Some older references could be replaced with more recent studies to reflect the latest advancements in the field.

#### 7. Language and Style:

- Grammar and Clarity: The paper has occasional grammatical errors and instances of passive voice that could be revised for clarity. Using active voice makes the text more transparent and more direct.
- Technical Jargon: The use of technical jargon without sufficient explanation might make the paper less accessible to a broader audience. Clear definitions or explanations would help.