

This manuscript attempts to address the complex problem of sentiment analysis in social media through an advanced machine learning model. The technical depth is appropriate, and the topic is timely, yet several areas require attention for clarity and depth.

- (1) The current review focuses heavily on foundational studies but lacks engagement with recent advancements in sentiment analysis that utilize attention mechanisms or hybrid models. Incorporate a review of literature from the past 3-5 years to strengthen the background.
- (2) The explanation of the attention mechanism is overly technical without clear application examples to the social media text analysis. Simplify the description and provide a concrete example of how attention improves sentiment classification in a real-world social media context.
- (3) The manuscript skips detailed steps involved in data preprocessing before it is fed into the model. Specify the text cleaning, tokenization, and vectorization processes used, including any tools or software employed.
- (4) The comparison between the proposed model and existing models like CNN and RNN is superficial. Delve deeper into why the proposed model outperforms others by discussing feature handling, sequence memory, and processing speed.
- (5) The section on practical application tests is vague about the environments and conditions under which the tests were conducted. Provide details on the deployment environment, real-time data handling capabilities, and user interaction scenarios.
- (6) Future work is mentioned in broad terms. Narrow down to specific, measurable objectives, such as improving the model's real-time processing capabilities or expanding its language support, which can directly follow from the concluded research.
- (7) Details on the tuning of model parameters, such as the number of layers, units in each layer, and the rationale for these choices, are missing. Discuss how these parameters were optimized based on the characteristics of the input data.
- (8) There is no thorough error analysis to understand model failures or misclassifications. Provide a breakdown of error types encountered (e.g., false positives, false negatives), especially for edge cases or ambiguous sentiments.
- (9) The manuscript uses heavy technical jargon which could be simplified for better accessibility and understanding without compromising technical accuracy. Rewrite complex sentences to be more concise and understandable to a broader audience