

Review of: "Leveraging Fine-Tuned Large Language Models in Bioinformatics: A Research Perspective"

Waqas Haider Bangyal¹

¹ University of Gujrat

Potential competing interests: No potential competing interests to declare.

1. Overall work is average but the organization/presentation of the paper is ordinary. It seems that this paper was submitted without careful and thorough review of the work. Writing and references need correction and there are many flaws in write-up and need to be removed. The work still needs to be refined and presentation of the work also needs to be improved. There are several editing and language issues which need to be addressed in terms of technicality and contributions, I don't believe there are many! Proposed methodology need to be elaborated with more detail and how it is efficient must be stated.
 2. The major weakness of the paper is the limited additional knowledge given here. - I failed to figure out what this study was trying to achieve. The paper as it is unfortunately does not provide any new information. There are several misspellings throughout the paper, time to time making it hard to understand. Always a careful proof-reading should be done before submitting a paper.
 3. You should share more thoughts on what you want to achieve with your study and how to do that. Otherwise the meaning of the study remains blurry to the reader and flushes out the interest towards the text. Once that is done, try to bundle up the remainder text around this idea as a supporting net. Now this paper feels like a group of disjointed thoughts.
 4. The paper is not well-structured and has not good list of references. The major weakness of the paper is the limited additional knowledge given here. The authors' contribution is only simulation of some simple scenarios to evaluate the impact of performance. What is the novelty of this research?
 5. Consider the following studies in the reference section:
 - Detection of fake news text classification on COVID-19 using deep learning approaches
 - A fine-tuned BERT-based transfer learning approach for text classification
1. The authors need to follow the journal format for citing the references. References are incomplete. Please check references carefully. For example the first reference does not have the journal title, volume, issue, and page numbers.
 2. The conclusion is mainly to describe the conclusions obtained by this study, rather than describe the research process like the abstract.
 3. Authors should provide more specific comments of the cited papers after introducing each relevant work. What readers require is, by convinced literature review, to understand the clear thinking/consideration why the proposed approach can reach more convinced results. This is the very contribution from authors. In addition, authors also should provide

more sufficient critical literature review to indicate the drawbacks of existed approaches, then, well define the main stream of research direction, how did those previous studies perform? Employ which methodologies? Which problem still requires to be solved? Why is the proposed approach suitable to be used to solve the critical problem? It needs more convinced literature reviews to indicate clearly the state-of-the-art development.

4. There are grammatical mistakes in the manuscript, the authors need to proofread it from native English speaker. Authors should use clearer and concise vocabulary to express their ideas and discussions.