

Review of: "A Simple Preprocessing Method Enhances Machine Learning Application to EEG Data for Differential Diagnosis of Autism"

Muhammad Shahid Iqbal¹

1 Anhui University

Potential competing interests: No potential competing interests to declare.

Overall, it is an interesting task. The task can be further improved by

- 1. The abstract requires enhancement. Kindly elucidate the study's progression in a more comprehensible manner.
- 2. Ensuring the novelty of the study within the abstract is crucial. This is not clear here; please rectify this.
- 3. Is it possible to draw a figure for your proposed method, a flow diagram of your whole model?
- 4. Please provide suitable references in the Literature Review section. (a) Hussain, W., Wang, B., Niu, Y., Gao, Y., Wang, X., Sun, J., ... & Xiang, J. (2019). Epileptic seizure detection with permutation fuzzy entropy using robust machine learning techniques. *IEEE Access*, 7, 182238-182258.(b) Iqbal, Muhammad Shahid, et al. "Deep learning recognition of diseased and normal cell representation." *Transactions on Emerging Telecommunications Technologies* (2020): e4017. (c) Iqbal, Muhammad Shahid, et al. "Efficient cell classification of mitochondrial images by using deep learning." Journal of Optics 48.1 (2019): 113-122. (d)Iqbal, Muhammad Shahid, et al. "Mitochondrial organelle movement classification (fission and fusion) via convolutional neural network approach." IEEE Access 7 (2019): 86570-86577.
- 5. The method section is not clear; explain the mathematical model of your proposed method.
- 6. It is better to add the algorithm of the proposed method.
- 7. Figures 2, 3, and 4 are not in good quality; all figures need to be redesigned and in good quality.
- 8. Appropriate references to metrics such as accuracy, sensitivity, and specificity should be provided in the Evaluation Measures section. Here, the following article is appropriate to use.
- In the Discussion section, the studies in the literature and the proposed model should be discussed in an argumentative way. Please correct this deficiency. This is quite an important matter.
- 10. The Conclusion and Future Work sections lack future extensions. Please specify the planned future extensions. Additionally, it is necessary to mention the limitations of the study.
- 11. The paper requires significant improvement in English grammar and readability. Several sections are challenging to follow due to language issues. A thorough proofreading and editing are recommended to enhance the clarity of the content.

