

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

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Potential competing interests: No potential competing interests to declare.

The authors of the paper have presented a novel pre-processing approach to EEG data to detect topological EEG features. The topic of the current work excites me; however, there are some major technical explanations that I found required to address during the review of the paper. My comments are as below.

- 1. The literature review portion in the Introduction section needs to be modified, highlighting the novelty of the presented work.
- 2. The kNN algorithm used in this work needs to be compared with other sufficient methods such as SVM, Random Forest, etc.
- 3. Why was the Manhattan distance considered in the kNN algorithm in place of the Euclidean distance?
- 4. For such a healthcare-related work, cross-subject validation is a must. Did the authors incorporate this validation in their study?
- 5. Efficacies of the presented approaches only have marginal improvements. Please explain this in the context of practical implementation scenarios?
- 6. Significant grammatical errors are present throughout the entire paper. Please revise the paper with a native-speaking expert.

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