

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.

This research addresses the important and timely topic of a new approach for preprocessing EEG data, and EEG preprocessing and classification analysis is a crucial topic. The authors present a study of EEG signal analysis, which began by applying a pre-processing step to remove artifacts from the EEG signal to make it highly visible for the post-processing step. Subsequently, they used the KNN algorithm to build a predictive model to differentiate between the two diagnostic categories (autism vs. NPD). However, there are some concerns that the authors have to consider and resolve, as follows:

1. In the abstract, the authors did not mention the problem statement, as they said, "present an alternative pre-processing approach of EEG data". It is necessary to mention that.
2. There is no novelty in the work; the authors have to focus on it and determine its value for readers. Previous works used the same methods; however, the current work uses new real data. Therefore, authors must clarify the difference between their work and previous works.
3. Figure 1 represents a table; therefore, it is preferable to convert it into a table.
4. This manuscript is very similar to the literature in terms of individual sentences and paragraphs; hence, it should be rewritten.
5. At the end of the introductory section, there is no overview of the arrangement of the rest of the manuscript; it should provide an overview of the following sections of the manuscript.
6. The discussion part is poorly written and should focus on the current work and explain why their work is different and better than previous work.
7. A flow chart is needed to illustrate the algorithms (pre-processing and post-processing steps) used in the current work.