

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.

I find the work very interesting, and it is currently very relevant, as early diagnosis of these conditions can help to improve the quality of life of the people who suffer from them. With respect to the writing, I can't say much, since I am not a native English speaker; it is difficult for me to give my opinion on the subject. Regarding the research, I would like to make the following suggestions:

- It seems to me that a section on the state of the art or related works is missing. This is to allow the reader to know, of course, which are the most recent researches about the topic.
- When a work is carried out, it is regularly compared with other techniques using the same data to determine the strength of the techniques used, or, failing that, to justify why this comparison was not made, either in terms of computational performance, accuracy of results, or any other.
- Although the cross-validation protocol used is adequate, other techniques could be used to provide a more rigorous evaluation of the predictive capacity of the model, or, failing that, to justify precisely the procedure used.
- More figures could be included to familiarize the reader with the algorithm used. This always helps to give a clearer and more general view of the research.
- Figures 1 and 4 should be relabeled as tables, making adjustments to the rest.
- It could be interesting to present those cases in which the model fails; this could provide valuable insights for future model improvements.