

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.

Clarity and Conciseness:

The abstract is clear and concise, effectively summarizing the key aspects of the study. However, there are a few areas where clarity could be improved.

Methodological Details:

Include more specific details regarding the pre-processing approach used, such as the rationale behind transforming EEG data into a triangular matrix and calculating the minimum spanning tree (MST).

Specify the machine learning algorithms used in building the predictive model, and briefly explain why the KNN algorithm was selected as the best-performing model.

Results Presentation:

The research work effectively presents the main results, including the global accuracy, sensitivity, and specificity achieved by the best-performing machine learning system. However, consider providing a bit more context on how these metrics were obtained and what they signify.

Implications and Conclusion:

Clearly state the implications of the study's findings, particularly in terms of their potential impact on diagnosing autism spectrum disorder (ASD) versus other neuro-psychiatric disorders (NPD).

The conclusion could be strengthened by highlighting the significance of the new pre-processing method and its potential to improve diagnostic accuracy while reducing computational time.

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