

# Review of: "FLAML-Boosted XGBoost Model for Autism Diagnosis: A Comprehensive Performance Evaluation"

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**Potential competing interests:** No potential competing interests to declare.

This is a very interesting approach to improve accurate diagnosis of autism spectrum disorder (ASD). The use of the FLAML-boosted XGBoost model seems a good idea and today are technological options to do it.

I'm not an expert in these methods and here are some of my general comments: this article addresses the critical challenge of imbalanced classification and emphasizes the importance of accurate autism diagnosis for early intervention and improved patient outcomes. The integration of advanced techniques from AutoML and the FLAML library is well-justified and promises to enhance model performance and efficiency.

I outlined two points for the authors:

1. The article identifies the presence of False Negatives in the Confusion Matrix but does not discuss potential reasons or strategies to address this issue. Adding some insights into why these instances occurred and potential avenues for improvement would enhance the article's completeness.
2. The article could conclude with a section on future directions and potential areas of improvement for the model. This could include suggestions for enhancing sensitivity, exploring ensemble methods, or evaluating the model on external datasets for generalizability.