# 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.

Abstract: Mentioning the best error rate is excellent, but how does this compare to other methods or baseline models? While the abstract mentions balancing the dataset, it doesn't specify how this was achieved.

Introduction: While the introduction refers to a "FLAML-boosted XGBoost model," it may be good to explain why XGBoost was chosen. Even a single sentence explaining why XGBoost was chosen or its overall benefits in categorization problems would be helpful. The introduction references challenges and citations, but it might be beneficial to briefly discuss what solutions were proposed previously and how the present study's approach is different or improved. A literature review should be provided or included to the introduction section. The significance of the study should also mentioned

Dataset and Preprocessing: The data should be provided better, such as represendent to a table by analyzing describe statistics etc. Consider explaining the ratio of the split for training and validation. E.g., "We allocated 80% of the dataset for training and 20% for validation. The number of samples in the dataset, both before and after oversampling should be added. Further information is needed to explain the data collection.

AutoML with FLAML: maybe this section could be added to the literature review

Methodology: You could also build and compare different models, such as**Support Vector Machine (SVM),** or **logistic regression model, Random Forest etc.** You can also test the cross-validation grid search.