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.

In this article, the authors used a case study on the diagnosis of autism to examine the problem of unbalanced classification using automatic machine learning (AutoML) approaches. Unfortunately, I tend to reject it due to the need for more technical details in this paper. I would kindly suggest the authors consider the following comments:

1. It would strengthen the paper if the authors could provide justifications and further explanations for the methodology because not all readers are familiar with the model “XGBoost”.
2. It is unclear to the readers by only providing descriptions for the dataset in Section 2. Tables or figures could be helpful to illustrate the data structure.
3. A benchmark model could be considered in the paper to justify the necessity of employing XGBoost.
4. Cross-validation would be helpful to comprehensively evaluate the model's performance.
5. Additionally, better relative work and citations would help the authors to provide better and more accurate information. The following paper might be a good one: Chen, Tianqi, and Carlos Guestrin. "Xgboost: A scalable tree boosting system." In *Proceedings of the 22nd acm sigkdd international conference on knowledge discovery and data mining* pp. 785-794. 2016.
6. The figures might need to be revised to satisfy the qualification for publication.