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 paper, the authors focus on addressing the challenge of imbalanced classification in autism diagnosis using automatic machine learning (AutoML) techniques.

Strengths

- The authors propose a hybrid approach that combines the established model FLAML with XGBoost.
- This approach shows promising results on common metrics.

Suggestions

- The abstract is a brief summary of the paper, and it is important to highlight the impact of the work. The imbalanced classification issue in autism diagnosis is a significant problem, and it is important to address this issue in order to improve the accuracy of autism diagnosis.
- The introduction should also state the claims of the study. What are the authors trying to achieve? Are they proposing a new method for addressing the imbalanced classification issue in autism diagnosis? Or are they simply evaluating the performance of existing methods? It is also important to discuss the novelty or uniqueness of the study. What makes this study different from other studies that have been conducted on this topic?
- The dataset and preprocessing section should include the size of the dataset. How many data points are there? What are the features of the data? The author should also mentiond how the data into training and testing sets. This is important so that the authors can evaluate the performance of their methods on unseen data.
- The authors used the Random Oversample technique to address the imbalanced classification issue in autism diagnosis. This technique is a simple way to balance the dataset by creating more copies of the minority class. However, it is important to discuss why the authors chose this technique. Are there other techniques that could have been used? What are the advantages and disadvantages of the Random Oversample technique?