

- Summary of the report.

This report utilizes the Light-GBM modal, a boosting tree-based model with several sample tricks to accelerate the training process, and achieves a high AUC score of 0.748. The report includes the data cleaning, feature engineering, methodology, result analysis, and model comparison.

- Describe the strengths of the report.

First of all, the report uses a series of artificial designed features, instead of only uses original features with some basic processing, such as one-hot encoding. Secondly, the report adapts the Bayesian Optimization in the hyperparameters searching. Using k-fold Cross-Validation to avoid over-fitting. Finally, the report shows the AUC scores that achieves by Random Forest, AdaBoost, and Bagging to show the advantages of their model.

- Describe the weaknesses of the report.

The report could consider adding some ablation experiments to show the effectiveness of feature engineering and hyperparameters searching.

- Evaluation on Clarity and quality of writing (1-5): **4.5**

*"1. Create new features: use financial knowledge to add new features from existing features."*

The report could consider showing some examples here.

- Evaluation on Technical Quality (1-5): **5**

- Overall rating: **5** (5- My vote as the best-report. 4- A good report. 3- An average one. 2- below average. 1- a poorly written one).

- Confidence on your assessment (1-3): **3**