**Peer review sheet**

MAFS6010Z, 2021 fall

Your name and sid: XU Tongcan 20835657

Group that you review: 16

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Confidence on your assessment (1-3) | Clarity and quality of writing (1-5) | Technical quality  (1-5) | Overall rating  (1-5) |
| Score | 3 | 4.5 | 4.5 | 4.5 |

Summary:

Group 16 chose to use six models of OLS, OLS-3, PLS, PCR, ENet, RF and GBRT to implement paper replication, and achieved good results.

Strengths:

1. In the data preprocessing part, some important data are described and displayed in tables to increase readability. At the same time, the processing of the null value of the data is also reasonable.
2. The author made a brief description of each model and attached some functions. In some models, the use of Huber loss may cause the model to perform better.
3. In the evaluation part, the author's model achieved good results and used multiple images to show the results, which are highly similar to the paper.
4. In the appendix of the report, the author wrote a quick summary of the models.
5. The framework of the report is complete and clear, and the layout is also excellent.

Weaknesses:

1. In the covariate selection of the model, the method of ‘only 94 covariates and the 8 macroeconomic factors separately’ feels that it lacks a certain degree of rationality.
2. In processing the null value of the data, the method of filling in the median for the data with a substantial missing percentage feels unreasonable.

Clarity and writing:

The report is clearly organized and the writing is very accurate, but the use of ‘article’ and ‘verb’ in some places is not very accurate

Technical quality:

The author has a deep understanding of the model, especially the choice of hyperparameters for some models, and finally achieved good results.