**Peer review sheet**

MAFS6010Z, 2021 fall

Your name and sid: LAM, Chung Wai (20430732)

Group that you review: 18

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|  | Confidence on your assessment (1-3) | Clarity and quality of writing (1-5) | Technical quality  (1-5) | Overall rating  (1-5) |
| Score | 2 | 4 | 5 | 5 |

Summary:

The report summarized the data description, data pre-processing (e.g., train-test split, missing value handling), the technical details for various models (e.g., simple linear regression, penalized linear regression, penalized linear regression-Elastic Network-Huber, dimension reduction, tree methods and neural network), features importance, models evaluation and comparison, conclusion, etc.

Strengths:

Overall, the group constructed the models successfully with clear visual aids for explanation. All the graphs (e.g., out-of-sample R-square, feature number, features importance, etc.) are included. Also, the group has explained the rationale behind using various techniques. For example, they tried illustrating the problems existing in the dataset (e.g., multicollinearity, sparsity, etc.) which dimension reduction is necessary for model development.

Weaknesses:

Although the report is longer than the requirement (i.e., within 8 pages for the technical report), it’s reasonable considering the number of models, visualizations and evaluations included in the paper being replicated. And for the gradient boosting regression tree, perhaps the group could try more learning rates for comparing the models’ performances respectively.

Clarity and writing:

The report is well written, insightful, and clear with sufficient graphs as visual aids.

Technical quality:

The group managed to utilize various models with proper data pre-processing, and closely followed the rationale and methods from the paper for replication, without any significant flaw.