

# 2025-08-23 Meeting Notes

## Date

23 Aug 2025

## Participants

- RAIL PG-2 project team

## Discussion topics

### 1. Research findings discussion

- Briefly explain the findings, and any interesting facts found from the dataset.
- Discussed the understanding of the current dataset.
- Reported the research findings and progress, and submitted the documents onto common drive and github.
  1. feature engineering: picked up several techniques to explain, and demonstrated how to apply to the dataset.
  2. feature selection: conducted a detailed research report, and summarized 3 major categories, including filter methods, wrapper methods, and embedded methods.
  3. machine learning: introduced logistic regression, SVM, random forest, DNN and transformer. Preliminarily proposed to use a transformer.

### 2. Snapshot and progress

- We summarized our progress, and discussed whether we need to add new user stories. At this phase, we may need further research work as we don't have full access to data, especially the data associated with when the rail would break.