

# Project Plan

## CS-410: Exploration of Data Science

### Project Objective

The objective of this project is determining the malfunctional detector by analysis the data from highway dataset. By matching and ranking the error data, this project could provide the dashboard of the priority of the detectors need maintenance.

### Project Approach

Our project approach has three steps goal-orientation approach: data analysis, establish infrastructure, query generation.

In the first phrase, data analysis phrase, the team will analysis the data and figure out the key variable of the dataset and find the best statistic method to determine the malfunctional detector and eliminate other possible error condition. In the second phrase, establish infrastructure, the team will cooperate and create the backend and frontend page for data analysis and user handling. In the third phrase, query generation, the team will cooperate and generate, implement, review the query that required for the dashboard function and show necessary data to support analysis result.

### Team Structure

Team will working together, but for tasks beside major development, each member will take different smaller tasks to improve working efficiency.

Mingjue Wang: infrastructure development, data analysis, Response optimization.

Ronnie Song: infrastructure development, Query development.

Frank Sun: query development, data analysis, documentation.

### Project Milestones

1. Dataset and data structure analysis, approach generation. – due 07/05/2020.
2. Infrastructure: backend development. – due 07/12/2020.
3. Infrastructure: frontend development. – due 07/19/2020.
4. Query generation and review. – due 07/26/2020.
5. Project review and summary. – due 08/02/2020.