# ENGG2112 Weekly Progress Report

Group: TUT06-06

Team Members: Daniel Chung, Mahadi Khan, Hong Quang Nguyen, Khoi Nguyen Pham

Project Title: FlowCastAI: Predicting Traffic with Machine Learning

--------------------------------------------------------------------------------------------------------------------------------------

Note briefly but clearly the tasks that have been assigned to each team member below. If the task has been completed, insert the date of completion. If the task is not complete, estimate a date when it will be completed and put it under “Date Due”. The “Task Name” is preferably a short title, e.g. “research known methods to detect Covid-19”. If the task is to be completed by only one person, leave the “Person Assisting” field empty.

Add or delete lines to/from the bottom of the table as necessary but do not delete tasks that were mentioned in previous reports. In other words, only add to the table or delete blank lines.

In class, each team member will verbally describe (in 3 minutes or less) to the tutor the progress of the tasks that they have been assigned, including but not limited to: difficulties encountered, solutions found, results obtained, follow-up actions. After individual reports are completed, one group member should summarise the team’s progress for the week. You may want to take turns to do this or have a single person represent the group every week.

Team Member Name: Daniel Chung

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | | **Task Name** | | **Person Assisting** | **Date Due** | | **Date Completed** |
| 1 | | Data collection | |  | 13/05 | |  |
| Outcome: Completed collection for traffic data. Collection of weather data is still in progress. | | | | | | | |
| 2 | | Data cleaning | |  | 13/05 | |  |
| Outcome: Completed cleaning for traffic data. Cleaning of weather data will begin once weather data is collected. | | | | | | | |
| 3 | Complete data pre-processing section of the report | |  | | 15/05 |  | |
| Outcome: Not started yet | | | | | | | |

Team Member Name: Khoi Nguyen Pham

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Task Name** | | | **Person Assisting** | **Date Due** | | **Date Completed** |
| 1 | Setup GitHub | | |  | 08/05 | | 04/05 |
| Outcome: Complete | | | | | | | |
| 2 | Begin programming subproblem 1: predicting traffic | | | Hong | 08/05 | | 08/05 |
| Outcome: Completed coding initial model and tested for dataset | | | | | | | |
| 3 | | Long Short-Term Memory (LSTM) |  | | 15/05 |  | |
| Outcome: Not completed | | | | | | | |
| 4 | | Create Gradient Boosting (XGBoost) model. |  | | 15/05 | 08/05 | |
| Outcome: Not completed | | | | | | | |

Team Member Name: Hong Quang Nguyen

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | | **Task Name** | | **Person Assisting** | | **Date Due** | | **Date Completed** |
| 1 | | Begin programming subproblem 1: predicting traffic | | Khoi | | 08/05 | |  |
| Outcome: Completed coding initial model and tested for small data | | | | | | | | |
| 2 | Make existing random forest code more robust. | |  | | 15/05 | |  | |
| Outcome: In progress | | | | | | | | |
| 3 | Test random forest model for full sized dataset | |  | | 15/05 | |  | |
| Outcome: Not started yet | | | | | | | | |
| 4 | Start on MLP model | | Khoi | | 15/05 | |  | |
| Outcome: In progress | | | | | | | | |

Team Member Name: Mahadi Khan

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | | **Task Name** | | **Person Assisting** | **Date Due** | | **Date Completed** |
| 1 | | Research AI models for subproblem A | |  | 08/05 | | 04/05 |
| Outcome: Complete | | | | | | | |
| 2 | Research AI models for subproblem B | |  | | 15/05 |  | |
| Outcome: Not started yet | | | | | | | |
| 3 | Start programming a model for subproblem B | |  | | 15/05 |  | |
| Outcome: Not started yet | | | | | | | |