

# Assignment 3

## COL761 REPORT

Q1. We have tried the following types of layers and from them observed corresponding results,

1. **GATv2Conv**: We found this model interesting as the results were really good. But while evaluating it on test nodes I found that the nodes were overfitting even for smaller learning rates.
2. **GATConv**: The results were similar to the previous one but with the difference that this took a lot of training time.
3. **SAGEConv**: We found this along the lines of the requirements put before us. We had to limit the training time and get good results too. As this was taking decent time and also giving good results. So I decided to go with this one.

**SAGEConv is the current State of the Art model that we are using for evaluation and training.**

DATASET	MAE
D1	1.9

Q2. In this one, we went through various videos and repositories already out there, that were trying to solve the same problem of traffic prediction. Among all the sources I found **A3TGCN** good.

1. **A3TGCN**: Although it's taking a huge amount of time, we observed that the rate of convergence is higher with this model.

DATASET	MAE
D2	1.6

**We have used the State of an Art model that we are using for evaluation and training.**