

CE 787A

MATLAB Assignment – 1

- 1) Using the given dataset ('smoothed_data.xlsx'), plot the following graphs for 10 vehicles:
 - a) Position vs Time
 - b) Speed vs Time for 2nd, 4th, 6th, 8th and 10th vehicles (using the Central difference method)
 - c) Acceleration vs Time for 2nd, 4th, 6th, 8th 10th vehicles (using the Central difference method)

Dataset Description:- 'Smoothed_data.xlsx' contains the following three features of trajectory data for 10 vehicles:

Vehicle_ID – unique vehicle id

Time – represents the time at 0.1 sec interval.

LocalY_smooth – represents the local longitudinal position in m.