**Future Development**

The current limitation of our project is the scarcity of the input variable, this project is currently dependent on the time series data of speed of the object at any instant. Thus the error in measurement of speed will greatly influence the result of the algorithms. So, for further development, the GPS Logger can be integrated with Gyroscope Sensor and Accelerometer of the phones. It helps to monitor the real-time movement of the object and provide more features to improve the accuracy of the output. The alignment and 3D acceleration will help in differentiating between the turns, stops and other unexpected anomalies ( potholes, speed breakers, rumble strips etc. ).

Another addition could be done in preprocessing by using the concept of Data Imputation or Map Matching approach to improve the results of GPS Logged data and hence greatly influence the results. Data Imputation will help us to improve the regularity of the data thus speed can be cross-checked with the computed speed using Speed = Distance / Time. It will also help to identify the acceleration at any instant of time. Acceleration of heavy vehicles and commercial vehicle is less as compared to light or private vehicles. Sometimes due to external factors like High rise buildings, Clouds, Heavy Traffic, Forest covers etc. the accuracy of GPS drops thus the reading of data is not correct. Thus to counter this problem, the map matching approach can be used. Map Matching will reduce the erratic behaviour of the GPS data and make it more reasonable by aligning the data with the Base map/Terrain or Road Network in Urban Environment.

The project can be trained as the Deep Neural Network and then can be developed into a standalone mobile/desktop application with GPS/Accelerometer/Gyroscopic Sensor integrated within them to make it full-fledged, ready to use application that directly presents the result to the user in a user-defined format( like .gpx , .kml, .csv etc. ). The application can be further developed to present results in Real Time.

It can be transformed into a module that can embed on other applications like GIS applications, Navigation applications, etc.