Project Name: Machine Learning Based Vehicle Performance Analyser   **Team Id:PNT2022TMI49883**

Vehicle's fuel consumption is influenced by external and internal factors. Road conditions, weather and traffic are considered as the external factors and vehicle characteristics,driving behavior and load are considered to be the internal factors.	The dataset consisted of a number of parameters of which few are speed, fuel level, fuel consumption and acceleration, the data was collected in the project requirements.	While both of them rely on on and off-board sensory data, the former aims to localize and classify the objects in the surrounding environment of the autonomous vehicle and the latter provides an understanding of the dynamics of surrounding objects and predicts their future behaviour.
Although engine and drive technology, vehicle type and condition influences vehicle's fuel consumption, personal driving style is an eminent factor and change in the style can minimize the fuel consumption.	The dataset consisted of a number of parameters of which few are speed, fuel level, fuel consumption and acceleration.	Several factors which directly influences the fuel consumption was considered in the study but other main factors like the engine RPM, traffic conditions and load were not considered in the study.
Driver is said to be aggressive when there is a higher VDI resulting in lower fuel economy.	Vehicle characteristics to build a model that predicts the fuel consumption either average consumption or on-the-go consumption, and the vehicle characteristics considered are the external characteristics like the weight, power and speed, not the sensor data of the engine or other factors like driving style or road condition combined with vehicle characteristics.	Research tries to use both driving behaviour and vehicle characteristics (sensor data) together to predict the fuel consumption.