

Project Objectives

Team ID	PNT2022TMID12635
Project Name	Machine Learning based Vehicle Performance Analyzer

It's a significant and intriguing challenge to predict a car's performance level. The primary objective of the current study is to forecast automobile performance in order to enhance specific vehicle behaviour. This can greatly reduce the fuel consumption of the system and boost its effectiveness. Analysis of the vehicle's performance depending on the kind of engine, number of cylinders, fuel type, and horsepower, among other factors. The health of the automobile may be predicted based on these variables. Obtaining, investigating, interpreting, and documenting health data based on the aforementioned three elements is a continuous process. Prediction engines and engine management systems both heavily rely on performance metrics like mileage, reliability, flexibility, and cost that may be combined together. To increase the performance efficiency of the vehicle, it is crucial to analyse the elements utilising a variety of well-known machine learning methodologies, including as linear regression, decision trees, and random forests. Automobile engineering's "hot subjects" right now revolve around the power, lifespan, and range of automotive traction batteries. We also take a performance in mileage into account here. We will create the models, utilising various techniques and neural networks, to resolve this issue. Then, we'll compare which algorithm accurately predicts car performance (Mileage).