In20-S1-CS5617

Dataset

Traffic Accident Dataset
This dataset contains the countrywide traffic accident data in the United States and collected from February 2016 to December 2019 having 49 variables using several data providers, including two APIs which provide streaming traffic event data. There are about 2.25 million records in this dataset.
https://www.kaggle.com/sobhanmoosavi/us-accidents

Team

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Github Repo link

https://github.com/teamDR/TrafficPredictionProject

Challenges

Whether the environmental related factors affect the accidents and which factors affect most in traffic accidents. Also real time accident prediction using these factors for future use.

Deliverables

Based on the traffic accident data, Descriptive, Predictive and Prescriptive analysis will be carried out. Historical data will be visualized in charts and graphs. And prediction model will predict the probability of accident occurrence based on predictive analysis details.

Outcome

The outcome of this project is a traffic prediction model which predicts the future accidents based on environmental facts. Based on historical data, Traffic histories will be analyzed using descriptive analysis methods. Those analytical data will be shown in graphical mode using graphs and charts. Insights to these accident data will be given after the visualisation process.

Assumptions

Assume there is no other facts that effect for traffic accidents. Only the mentioned environmental facts such as temperature, humidity, pressure are considered to predict future accidents.