





# Driver Profiling and Accident Hotspot Prediction

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#### Datasets

This information is already provided in the given datasets.

Latitude
Longitude
Location Name
Speed
Time
Alarm Type

They also have crucial effect on accidents and thus we will consider these attributes in our evaluation.



Weather (visibility, sky conditions, etc.)
Peak Hour Timings
Potholes
Accident prone zones

### Accident Likelihood Labels

Latitude Longitude **Location Name** Speed Time Alarm Type **Weather Conditions** Peak hour timings **Potholes** Accident prone zones

Evaluate based on clustering algorithms

Labels

High

Low

## Machine Learning Algorithms

Latitude

Longitude

**Location Name** 

Speed

Time

Alarm Type

**Weather Conditions** 

Peak hour timings

**Potholes** 

Accident prone zones



Labels

High Low



Compare the performance of accident likelihood labelling based on clustering samples

### Solution

Latitude

Longitude

**Location Name** 

Speed

Time

Alarm Type

**Weather Conditions** 

Peak hour timings

**Potholes** 

Accident prone zones



High Low



ML algorithm training and comparison



Find the best ML solution to predict accident hotspots