**Dataset Information**

Training Data – The dataset contains 12994 observations and 5 variables which include Length of vehicle in cm, weight of vehicle in kg, Number of axles etc. Out of 12994 approximately 21.3% of the drivers are labelled as aggressive, 49.4% as Normal and rest 30%as vague.

Train\_WeatherData – The dataset contains 162,566 observations and 9 variables.

Train\_Vehicletravellingdata – The dataset contains 162,566 observations and 10 variables. The dataset provides information about the preceding vehicle and the road with respect to the weather.

**Attribute Information**

V1 Date & time of data

V2 Length of vehicle in cm

V3 Lane of the road of the vehicle(1 &2)

V4 Speed of the vehicle (kph)

V5 weight of vehicle in kg

V6 Number of axles

V7 ID of the preceding vehicle

V8 Speed of the preceding vehicle (kph)

V9 Weight of the preceding vehicle (kg)

V10 Length of preceding vehicle (cm)

V11 Time gap with the preceeding vehicle in seconds

V12 Weather details-Air temperature

V13 Precipitation-(Clear,rain, snow)

V14 Precipitation intensity- none, low, moderate, high

V15 Relative humidity-

V16 Wind direction-0 to 360)

V17 Wind speed in m/s

V18 Condition of the road wrt weather

### Software Requirements

Python version: 3.6

Modules used: datetime, pandas, numpy, matplotlib, sklearn, time

### Running the software

To run the software, navigate to the top-level directory and type

jupyter notebook predict\_energy\_consumption.ipynb