04 : 01 : 51 : 28
DAY HRS MIN SEC

14 LIVE EVENTS

Sangam 2019 - ML Hackathon by IITMAA

LIVE

Jul 26, 2019, 06:00 PM IST - Aug 04, 2019, 11:55 PM IST

Predict the traffic volume

Max. Marks: 100

Indian metro cities are famous for their notoriously varied traffic volume that is experienced by commuters every day. People plagued with traffic jams often raise concerns over poor traffic management systems. But with so much technology at our disposal, why should we continue to deal with traffic management in obsolete ways?

In this modern and advanced era, why the problems regarding traffic management should be dealt with in obsolete ways?

Your city's Traffic Police department has decided to use Machine Learning and Artificial Intelligence techniques to solve their traffic problems. They have collected traffic volume patterns and climate conditions that have been observed for 4 years. They want to be able to forecast the traffic volume.

Task: Your task is to predict the traffic volume for given time duration and climate conditions.

Data description

Columns	Description
date_time	Date, time, and hour of the data that is collected in the local IST time
is_holiday	Categorical Indian national holidays combined with regional holidays
air_pollution_index	Air Quality Index (10-300)
humidity	Numeric humidity in Celcius

wind_speed	Numeric wind speed in miles per hour
wind_direction	Cardinal wind direction (0-360 degree)
visibility_in_miles	Visibility of distance in miles
dew_point	Numeric dew point in Celcius
temperature	Numeric average temperature in Kelvin
rain_p_h	Numeric amount in mm of rain that occurred in the hour
snow_p_h	Numeric amount in mm of snow that occurred in the hour
clouds_all	Numeric percentage of cloud cover
weather_type	Categorical short textual description of the current weather
weather_description	Categorical longer textual description of the current weather
traffic_volume	Numeric hourly traffic volume bound in a specific direction

Data Set

- **Train.csv**: 33750 x 15
- **Test.csv**: 14454 x 14
- **Submission.csv**: 14454 x 2

Sample submission format

date_time	traffic_volume
1969-05-17 21:00:00	500
1969-05-17 21:00:00	530
1969-05-17 21:00:00	545

1969-05-17 22:00:00	750

Please Note:

- Only the team leaders are supposed to give the submission for the challenge and only these submissions will be considered valid for the final shortlist.
- Team members can collaborate offline with the leader for the submissions but need not register and participate in the challenge.

Evaluation criteria

$$leaderboard\ score = max(0, (100 - rmse))$$

Download dataset

Upload Prediction File

Please upload the prediction file in the format as stated in the problem.

Choose File No file chosen

Submit & Evaluate

Upload Source Files

You need to submit a zip or tar archive consisting of a text file explaining your approach, details about feature engineering, tools you used and the relevant source files.

Choose File No file chosen

Upload