

Jupyter Notebooks Table of Contents

Part 1 (Preprocessing & Initial EDA)

1. Loading libraries and the dataset
2. Check data types and format of the data frame
3. Examining Location
4. Checking for duplicate data
5. Dealing with missing data
6. Examine the zero travel rows
7. Zip code null values
8. Visualising the data
9. Save dataframes into csv

Part 2 (EDA & Modelling Notebook)

1. Loading libraries and the dataset
2. Transpose dataframe for duplicates
3. Converting dates to datetime data type
4. One hot encoding analysis
5. One Hot Encoding Columns
6. Concatenating one hot encoded data frame and original data frame
7. Extracting Season from the Incident Datetime column
8. One hot encode Season
9. Final Dataframe
10. Correlation Matrix on a Heatmap
11. Modelling
12. Scaled Data
13. Linear Regression
14. Forward Stepwise Linear Regression
15. Ridge and Lasso Regression
16. Decision Tree Model
17. KNN Model
18. Examining the Target Variable `INCIDENT_TRAVEL_TM_SECONDS_QY`
19. Model Evaluation
20. Model Evaluation Conclusion