CAR ACCIDENT SEVERITY, SEATTLE.

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Prediction of Car Accident Severity in Seattle, Washington

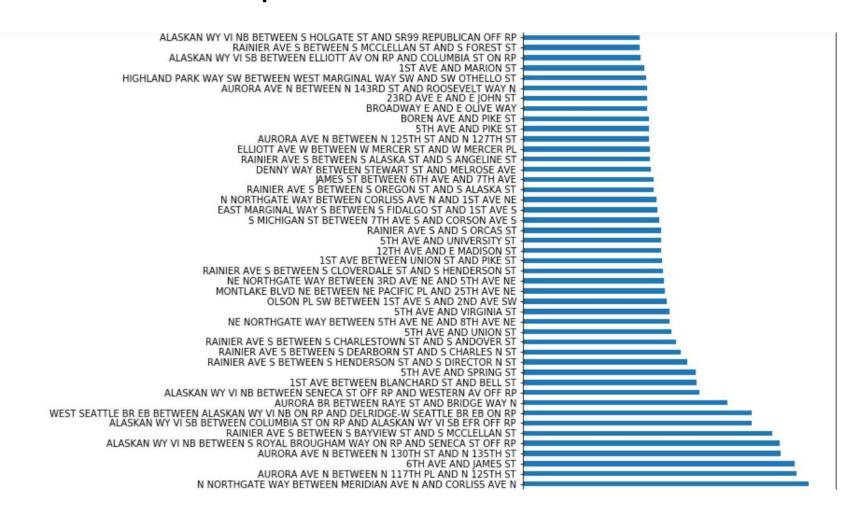
Seattle observes car accident on a daily basis due to the weather condition and also traffic congestion is terrible in there.

With the help of Data Science and Machine Learning Algorithm, I would show what are the factors that need maximum heed to minimize the car accidents caused in Seattle.

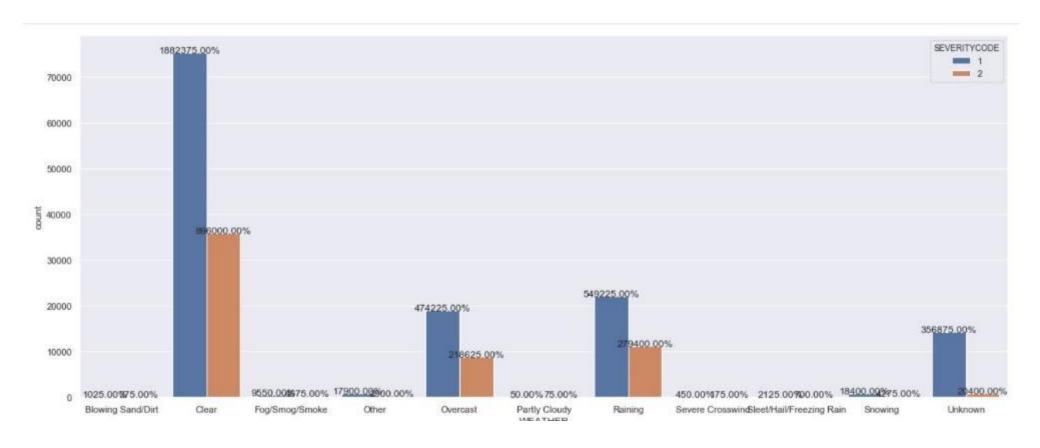
Data Acquisition and Cleaning

- Data-Collisons.csv as provided is considered as the data set.
- Data for accidents in various locations from 2004 to 2020 is there.
- In total, 194673 rows and 38 columns are present.
- The feature chosen are WEATHER, LIGHTCOND, ROADCOND and SEVERITYCODE and rest the drooped.
- For map, X and Y i.e latitude and longitude value is considered and rows with NaN values are dropped.

About 50 areas around Seattle, prone to accidents are depicted.



The effect of weather adversity is shown here with respect to property damage and injury collision. Similarly, impact of light and road condition are plotted.



Future Directions

- Certain unknown and unrecognized factors need us to go deeper to check how they put their effect on the reason behind these accidents.
- Other algorithms like Gradient Boosting and Naïve Bayes can be used to determine which is the best classifier.
- Better dataset can improve the performance of the models.