Predict Severity of An Accident

1. **Introduction/Business Problem**

   There are many uncertainties on the road that could happened at any time to anyone. Those uncertainties could lead to a traffic accident. For example, bad weather, speed, location, and human error determine how the accident is. But is there any correlation between all those uncertainties factors with the severity of an accident? Imagine, if we could predict the severity of an accident by the location, weather, road, time, etc., then the driver could be more aware or more careful or take another road or cancel the plan. In the hope, the result of this project could decrease the number of traffic accident.

2. **Data**

   The data that is used in this project is collision data from Seattle Government from 2004 till present. The data is also recommended by Data Science Capstone Course on Coursera. The data is included with 38 features, 194673 rows, with a categorical label that consists of 1 and 2 where 1 represents property damage and 2 represents injury. For more information about the data, visit here. This data will be done by using best machine learning classification method.

3. **Methodology**

   EDA, statistical testing, and machine learning method.

4. **Results**

   Result analysis

5. **Discussion**

   Recommendation.

6. **Summary**