

Predict Severity of An Accident

1. Introduction/Business Problem

There are many uncertainties on the road that could happen 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 uncertainty 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 give more insights about traffic accident severity and increase the awareness of the driver.

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](#). The features that might determine the severity of an accident are address, collision, and junction type, weather, road condition, and light condition. This data will be done by using the best machine learning classification method.

3. Methodology

EDA, statistical testing, and machine learning method.

4. Results

Result analysis

5. Discussion

Recommendation.

6. Summary