Introduction

With advancements in technology and the constant need to be connected, more and more drivers are driving distracted. In 2018, the total number of fatal crashes was 33,564. Of those 33,564 crashes, 2.628 were distraction-affected fatal crashes was and the total number of crashes were the cellphone was in use was 349 (Insurance Information Institute). As the age of cellphone use gets younger and younger and more people starting to rely on texting instead of speaking on the phone, distracted-driving due to cellphone use has become a major problem. However, with the growth of technology and Artificial Intelligence (AI) things such as autonomous driving has come to light.

Although the goal of autonomous driving is to have cars drive themselves completely without any human engagement, there are safety factors that are out of the control of the human driving and the car itself. These safety factors include road conditions, weather, location of accidents and human error, such as driver intoxication.

The target of this observation are municipal emergency services, car insurance companies and car companies that work on autonomous vehicles.

Business Problem

Although autonomous driving may solve the problem of distracted driving, the greatest challenge is ensuring safety to the drivers. To address this problem our goal will be to predict the severity of a car crash.

Data

The data that will help predict the severity of an accident were obtained from (add link here).

This dependent variable, 'SEVERITYCODE', are as follows:

- 3: Fatality – High Probability
- 2b: Serious Injury – Mild Probability
- 2: Injury – Low Probability
- 1: Property Damage – Very Low Probability
- 0: Unknown – Little to No Probability

The data will need to be preprocessed to remove/fill in null values.