

# **The Prediction of car accident's severity**

## **Introduction**

### **Background**

The US average number of car accidents is 6 million every year. These car accidents resulted in more than 30000 fatalities and 3 million injuries annually. 60% of the those injuries resulted in permanent disabilities among the drivers. Although the number of fatalities per the total US population declined over the last two decades, the numbers started to increase in 2015 and continued to move up in 2016. According to business insider, there are seven common causes of car accidents in the US. Distracted driving due to paying attention to road, smartphones or applying makeup as well as driving under influence are the leading causes of car accidents. Breaking the speed limit is the second cause of car accidents. Although, all of the previous causes are driver related, there are other driver's unrelated causes such as bad weather, low visibility (night time), or road condition. To help the drivers to avoid being involved in a car accident, it will be important to predict how severe the accident would be if the driver got involved into an accident based on these factors causing accidents, so that the driver would drive more carefully or even change his travel if he is able to.

### **Problem**

it is important to have data associate how severe the accident will be and some factors such as the weather condition, road status, and degree of visibility. With such data, the project aims to build a model that could predict the possibility of how sever the accident will be.

### **Interest**

The car drivers will be interested in such model that predict the severity of the car accident based on the current circumstances of the driver and/or the trip , so that the driver would drive more carefully or even change his travel if he is able to.