Car accident severity

Week 1

1. Introduction/Business Problem

1a. Report

Road traffic crashes result in the deaths of approximately 1.35 million people around the world each year and leave between 20 and 50 million people with non-fatal injuries. More than half of all road traffic deaths and injuries involve vulnerable road users, such as pedestrians, cyclists and motorcyclists and their passengers (1).

A number of factors contribute to the risk of collisions, including vehicle design, speed of operation, road design, road environment, driving skills, impairment due to alcohol or drugs, and behavior, notably distracted driving, speeding and street racing (2).

A number of physical injuries can commonly result from the blunt force trauma caused by a collision, ranging from bruising and contusions to catastrophic physical injury (e.g., paralysis) or death (2).

Human factors in vehicle collisions include anything related to drivers and other road users that may contribute to a collision. Examples include driver behavior, visual and auditory acuity, decision-making ability, and reaction speed (2).

1.b Target

This Project looks into using various Python-based machine learning and data science libraries in an attempt to build a machine learning model capable of predicting Car Accident Severity.

References

(1). World Health Organization: http://www.who.int

(2). Wikipedia: https://en.wikipedia.org/