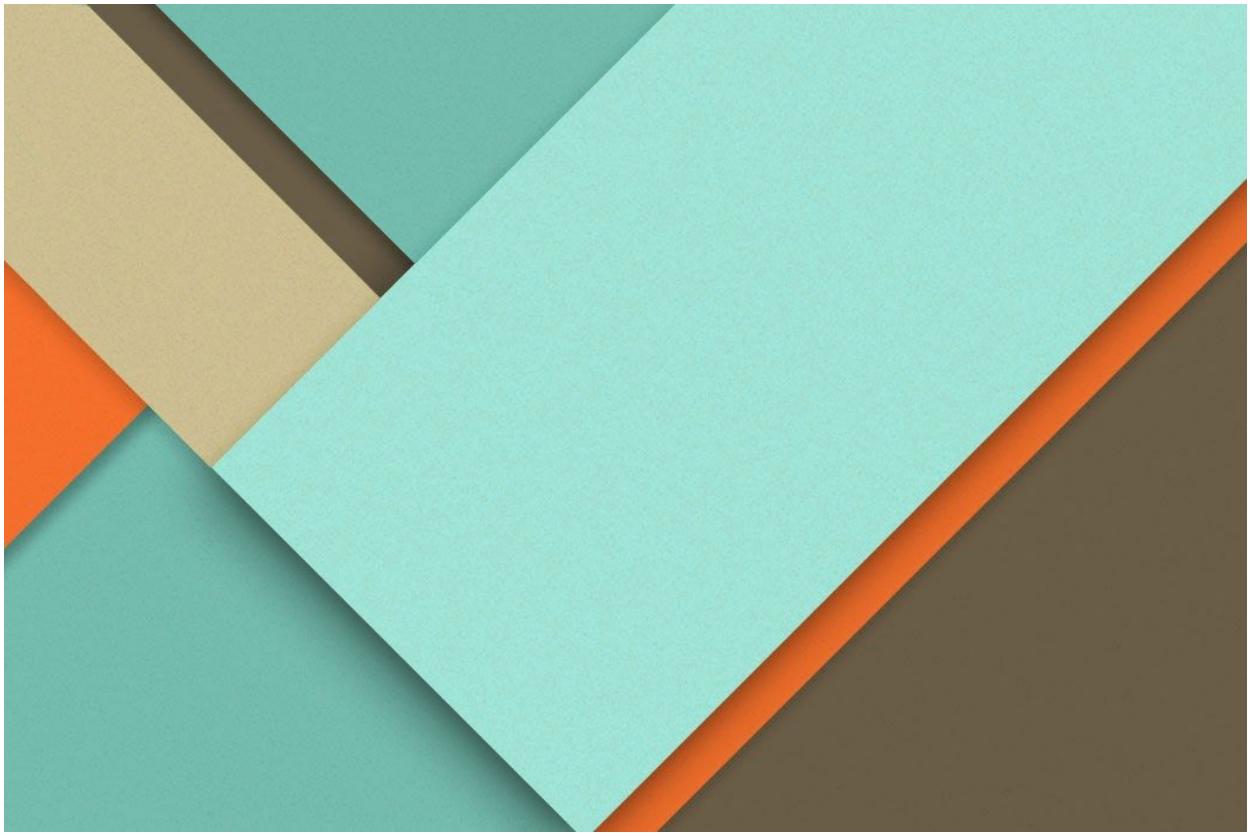

Capstone Project - Car Accident Severity

IBM - Data Science Specialization

- Sandeep krishna Donepudi

Introduction / Business Understanding

Road accidents constitute a major problem in our societies around the world. The World Health Organization (WHO) estimated that 1.25 million deaths were related to road traffic injuries in the year 2010. For the year 2016, the USA alone had recorded 37, 461 motor vehicle crash-related deaths, averaging around 102 people per day. In Europe, the statistics also indicate that each minute, there are 50 road deaths recorded in the year 2017.

Can machine learning help us understand the causes and the factors that affect car crash severity?

In most cases, not paying enough attention during driving, abusing drugs and alcohol or driving at very high speed are the main causes of occurring accidents that can be prevented by enacting harsher regulations. Besides the aforementioned reasons, weather, visibility, or road conditions are the major uncontrollable factors that can be prevented by revealing hidden patterns in the data and announcing warning to the local government, police and drivers on the targeted roads.

The target audience of the project is local government, police, rescue groups, and last but not least, car insurance institutes. These can get useful information from the model regarding the severity of an accident basis the factors mentioned above. Its results are going to provide some advice for the target audience to make insightful decisions for reducing the number of accidents and injuries.