Predicting car accidents severity in the US

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1. Introduction

1.1 Background

The high death rate from road accidents is a major concern in today's society. An efficient and valid treatment is therefore of great importance for citizens and societies. Large efforts and studies have addressed the question of road safety. From year 1913 to year 2018 the was a 96% improvement in the death rate. The research is therefore actively participating in reducing mortality rate in roads. In this report we will be studying the car accidents severity in the US between 2016 and 2020 in terms of fatality, injuries and material damages.

1.2 Problem

The data we are using include date and time of the incidents, category of junction at which collision took place, the weather condition, and other parameters that describes the environment and the situation that led to the accident. This project aims to predict the severity of an accident based on these parameters.

1.3 Interest

The analysis will take into account different aspects and factors that can be valuable to car users to avoid and reduce accident risks.

2. Data Description

To analyse the problem i used these datas: A Countrywide Traffic Accident Dataset (2016 - 2020) from Kaggle [1]. The Data is collected using streaming reports on important traffic events. This data is captured by a variety of entities, such as the US and state departments of transportation, law enforcement

agencies, traffic cameras, and traffic sensors within the road-networks. There are about 3.5 million accident records in this dataset.

3. Methodology

4. Results

5. Discussion

6. Conclusion

7. References

[1] US Accidents