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Applied Data Science Capstone

Capstone Project – Car accident severity (Week 1).

1. Introduction

Traffic accidents cause not only a huge amount of deaths around the world but produces economic costs to governments. According to Masoumi, et al. (2016), “Traffic accidents are the 8th cause of mortality in different countries and are expected to rise to the 3rd rank by 2020.” Analyzing the document and the data presented by the authors mentioned previously; car accidents are a concerning problem that keeps growing and taking several lives through its constant increment. The affected parts within traffic incidents are not only the actors involved directly in the accidents but the entire society, because as it was mentioned before accidents generate economic losses to governments, society, and at last the insurance companies. After observing the problems caused by traffic accidents it is necessary to develop a solution that would help saving millions of lives that are involved in car accidents, by creating a model that allow people who is travelling from one point to another to be aware if it is secure to drive through a determine highway, road, etc., due to many factors such as, road condition, weather, vehicles affluence, etc. So, the general purpose of this capstone project is to create a machine learning model able to identify and classify when is secure to travel on a road trip and avoid traffic accidents.

Bibliography:

- Masoumi, K., Forouzan, A., Barzegari, H., Asgari Darian, A., Rahim, F., Zohrevandi, B., & Nabi, S. (2016). Effective Factors in Severity of Traffic Accident-Related Traumas; an Epidemiologic Study Based on the Haddon Matrix. *Emergency (Tehran, Iran)*, 4(2), 78–82.
- Yannis, George & Theofilatos, Athanasios Akis & George, Pispiringos. (2017). Investigation of road accident severity per vehicle type. *Transportation Research Procedia*. 25. 2081-2088. 10.1016/j.trpro.2017.05.401.