**Data Description**

**Predicting Car Accident Severity.**

**Astrid Ferreira**

**Description of the problem and a discussion of the background.**

**Background**

Every year car accidents cause hundreds of thousands of deaths worldwide. Ac-cording to a research conducted by the World Health Organization (WHO) there were 1.35 million road tra c deaths globally in 2016, with millions more sus-taining serious injuries and living with long-term adverse health consequences. Globally, road tra c crashes are a leading cause of death among young people, and the main cause of death among those aged 15{29 years. Road tra c injuries are currently estimated to be the eighth leading cause of death across all age groups globally, and are predicted to become the seventh leading cause of death by 2030[1].

Leveraging the tools and all the information nowadays available, an extensive analysis to predict tra c accidents and its severity would make a di erence to the death toll. Analysing a signi cant range of factors, including weather con-ditions, locality, type of road and lighting among others, an accurate prediction of the severity of the accidents can be performed. Thus, trends that commonly lead to severe tra c incidents can help indentifying the highly severe accidents. This kind of information could be used by emergency services, to send the exact required sta and equipment to the place of the accident, leaving more resources available for accidents occurring simultaneously. Moreover, this severe accident situation can be warned to nearby hospitals which can have all the equipment ready for a severe intervention in advance.

Consequently, road safety should be a prior interest for governments, local authorities and private companies investing in technologies that can help reduce accidents and improve overall driver safety.

**Problem**

Data that might contribute to determining the likeliness of a potential acci-dent occurring might include information on previous accidents such as road conditions, weather conditions, exact time and place of the accident, type of ve-hicles involved in the accident, information on the users involved in the accident and o course the severity of the accident. This projects aims to forecast the severity of accidents with previous information that could be given by a witness informing the emergency services.