

# Tesla Deaths

Mohammad Ausaf Shah

January 2023

## 1 About this dataset

**Tesla Deaths Dataset** reveals an in-depth analysis of tragic Tesla vehicle accidents that have resulted in the death of a driver, occupant, cyclist, or pedestrian. It contains an extensive amount of information related to the fatal incidents including the date and location of each crash, model type involved and if Autopilot was enabled at the time. Every case is given its own unique identifier for easy reference and thorough review. Now is your chance to dive deep into these records to truly understand what happened during those tragic events and how we can prevent them from happening again

## 2 How to use the dataset

This dataset provides a comprehensive overview of the Tesla vehicle accidents that have resulted in fatalities. It includes details on the date and location of each incident, model involved, crash description, fatalities, and Autopilot usage. This dataset can be used to analyze the frequency and locations of these fatal accidents as well as gain valuable insights into potential safety risks associated with driving/operating Tesla vehicles.

To begin your analysis with this dataset, start by reading through the information contained in each column: Case (unique identifier for each case), Year (year of incident), Date (date of incident), Country (country where the accident occurred), State (state where the accident occurred), Deaths (deaths), Tesla driver (whether the Tesla driver was killed in the accident.), Tesla occupant (whether a Tesla occupant was killed in the accident.), Other vehicle (other vehicle), Model (model of Tesla vehicle involved), AutoPilot claimed

(auto Pilot Claimed), Source (source of the data.). All columns are mandatory for analysis.

Once you have familiarized yourself with this data set, consider looking at how many fatal accidents there have been over time by creating line graphs to show trends over years or states. You may also decide to review incidents based on geographic location or model type to determine which locations or model types may require further investigation and testing in terms of Tesla's safety features. Additionally consider using descriptive analytics such as means and medians to determine if certain models are more prone to accidents than others compared against one another; while also exploring if Autopilot feature usage has any correlation to higher rates/ numbers involving fatalities .

Using this data set can help increase awareness about potential safety risk related issues associated with driving/ operating a Tesla vehicle allowing individuals involved production side decisions or investing decisions have a better understanding when entering such fields . We do recommend however that when conducting your analysis , it's important understand proper ways for handling missing data points so that users can get an accurate picture related current issues surrounding vehicular mistakes involving teslas vehicles

### **3 Research Ideas**

Estimating the safety risk of Autopilot feature usage in different countries and states. By analyzing the differences in fatalities between Tesla vehicles operating with and without Autopilot, researchers can infer risks associated with Autopilot use.

Examining the relation between driver / occupant fatalities and Tesla vehicle models over time. Through observation of trends in model-specific fatalities across years, engineers may be able to identify vulnerabilities or safety features that should be improved upon in the next version of a car model.

Creating predictive models to assess crash probability per country or state based on uncontrollable factors such as road environment or traffic conditions by analyzing large numbers of reported accidents for which there were no fatalities but had similar characteristics (time of day, weather conditions, speed limit etc). Technological developments such as self-driving cars could potentially

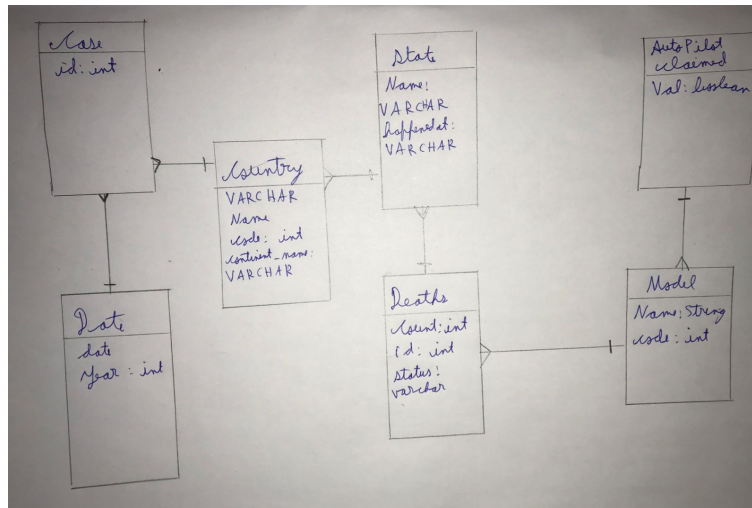
benefit from this type of predictive evaluation method to enhance their safety by improving preventive measures ahead of accidents occurring

## 4 Motivation

The automakers rarely share this data with the public. That has clouded the understanding of the risks and rewards of driver-assistance systems, which have been involved in hundreds of crashes over the past year.

But experts say this data could fundamentally change the way regulators, police departments, insurance companies and other organizations investigate anything that happens on the road, making such investigations more accurate and less costly.

## 5 Schema



## 6 References

<https://www.kaggle.com/datasets/thedevastator/tesla-accident-fatalities-analysis-and-statistic>