

A photograph of a busy city street in Chicago, likely during rush hour. The street is filled with cars in multiple lanes, with a yellow taxi visible in the middle ground. In the foreground on the right, a traffic light is shown with its red light illuminated. Pedestrians are visible on the sidewalk to the right. The overall scene depicts a congested urban environment.

Chicago Car Crash

THE PURPOSE OF THIS PROJECT IS TO GIVE INSIGHT ON CAUSES OF ACCIDENTS
AND HOW TO CURB ROAD ACCIDENTS IN CHICAGO

Data

- ▶ Data containing road accident records was provided in two separate datasets
 - ▶ 1. Chicago crashes- Contains all accident records
 - ▶ 2. People- Contains details of people involved in the accidents
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- ▶ https://data.cityofchicago.org/Transportation/Traffic-Crashes-Crashes/85ca-t3if/about_data

Overview of Some Columns in the Data

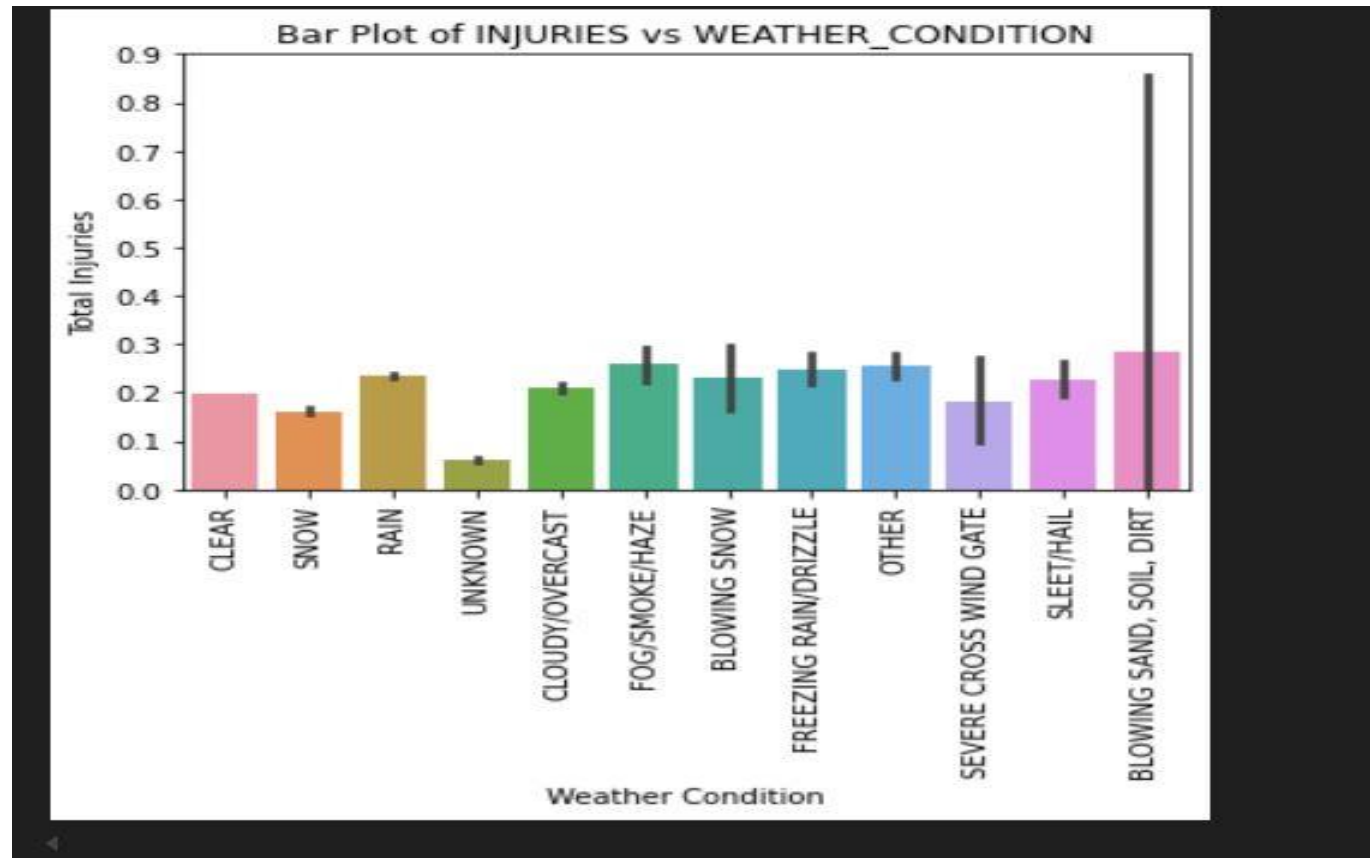
- ▶ **id**: Unique identifier for each crash.
- ▶ **crash_date**: Date when the crash occurred.
- ▶ **crash_time**: Time when the crash occurred.
- ▶ **town**: Town or location where the crash took place.
- ▶ **city**: City where the crash occurred.
- ▶ **state**: State where the crash occurred.
- ▶ **country**: Country where the crash occurred.
- ▶ **total_injured**: Total number of individuals injured in the crash.
- ▶ **total_killed**: Total number of individuals killed in the crash.
- ▶ **injury_incapacitated**: Number of injuries resulting in incapacitation.
- ▶ **injury_non_incapacitated**: Number of injuries not resulting in incapacitation.
- ▶ **most_severe_injury**: Description of the most severe injury sustained in the crash.
- ▶ **crash_type**: Type or nature of the crash (e.g., rear-end, side-impact).
- ▶ **contributory_cause**: Primary cause contributing to the crash.

Methodology

- ▶ Our mission is to identify patterns in our dataset.
- ▶ we need to clean the data, check for missing values, and determine which columns can be advantageous for our analysis.
- ▶ To explore the relationship between car crash frequency or severity and variables in the dataset, we can utilize visualization tools and machine learning models.

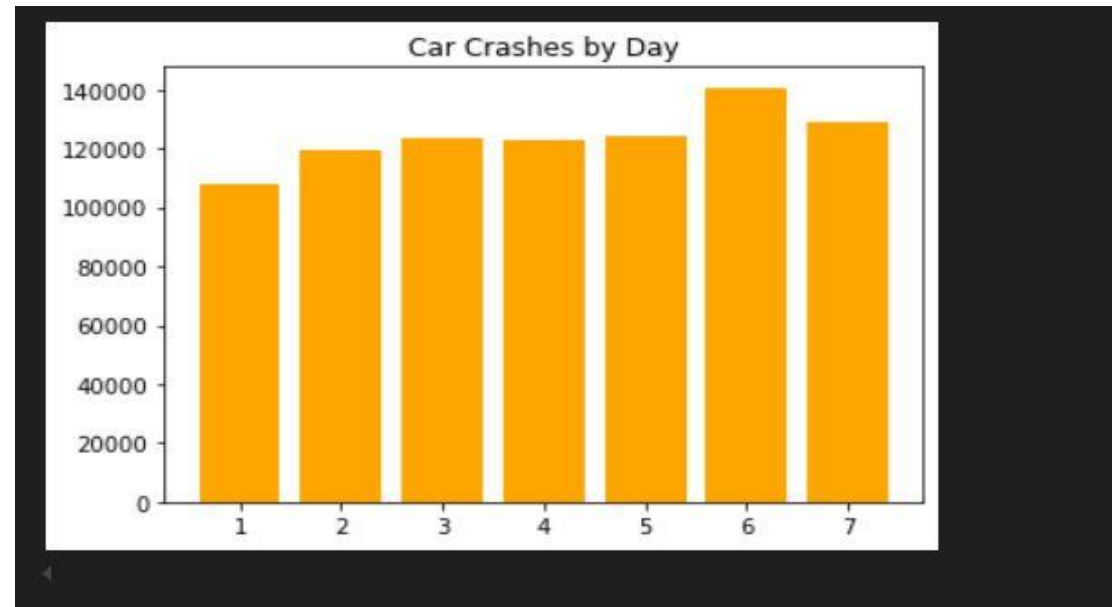
Analysis

- Accidents and weather conditions



Accidents by day of the week

- Highest accidents happen on day 5,6, and 7 (Weekends)



Crashes by hours of the day

- Most accidents occur between 05.00-10.00 HRS and 15.00-20.00 HRS

