

Road Accident Data Analysis in India

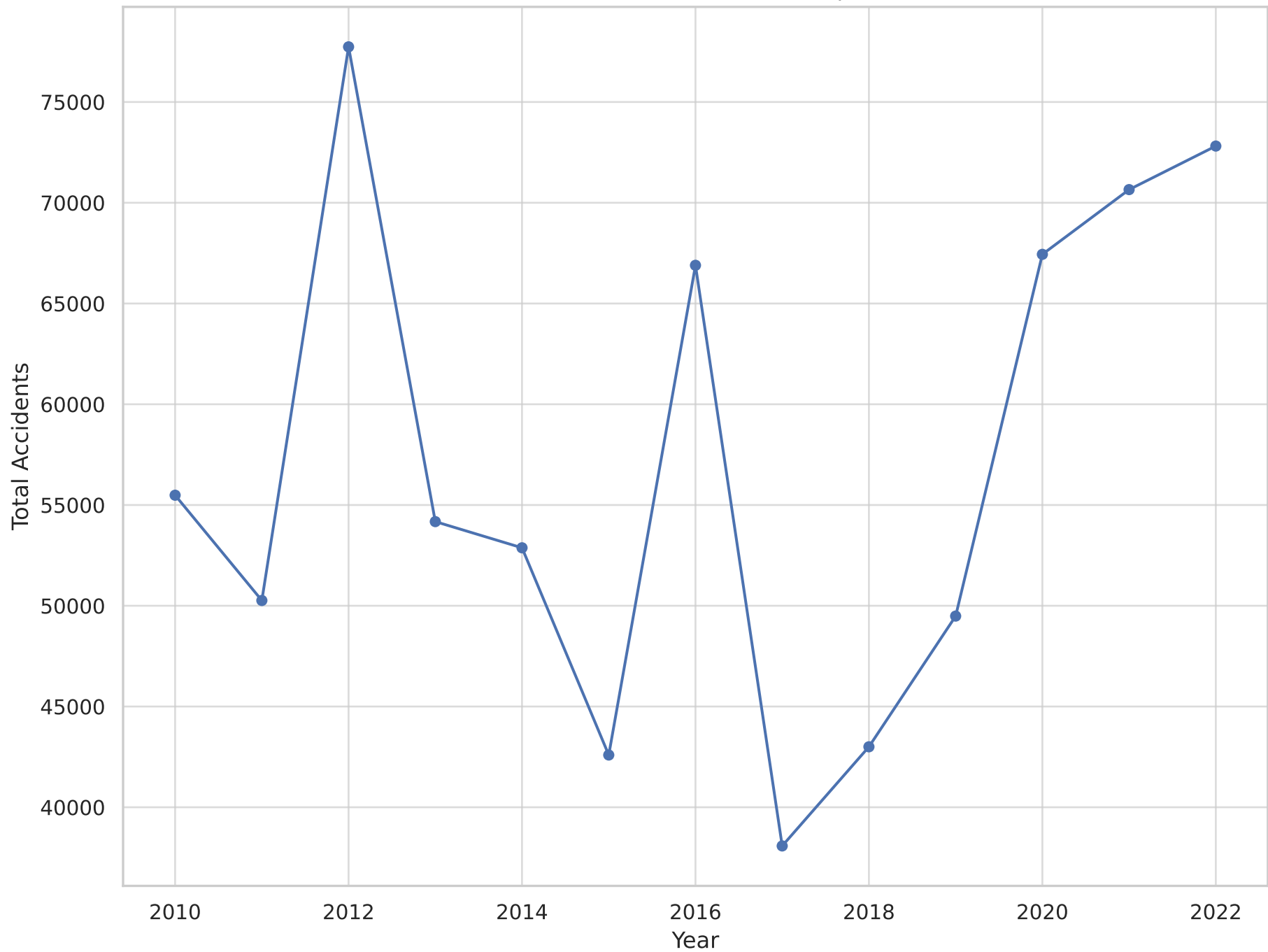
Exploratory Data Analysis — Submission for NHAI Internship

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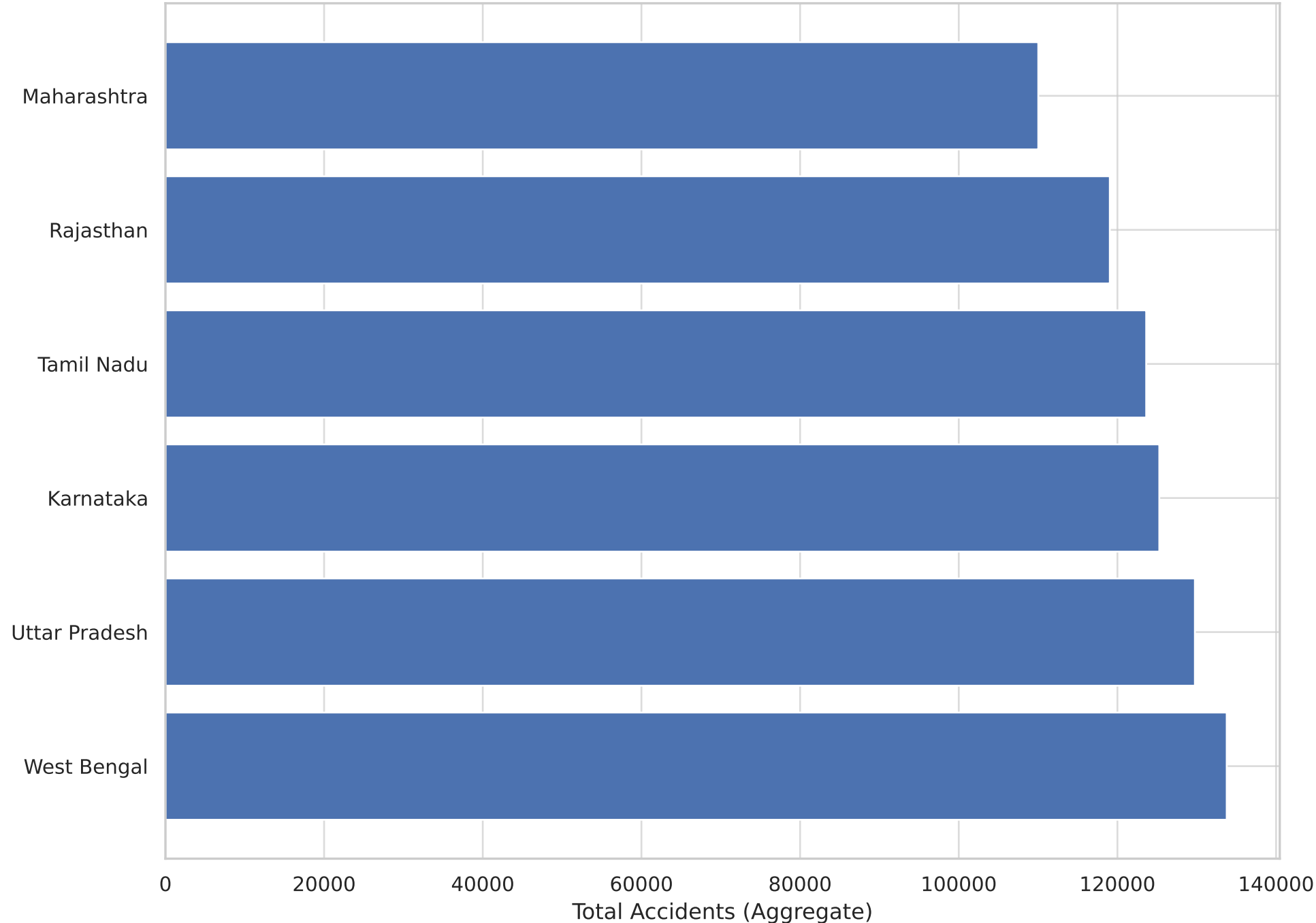
Objective:

Analyze road accident data to identify trends, hotspots, and insights useful for highway safety.

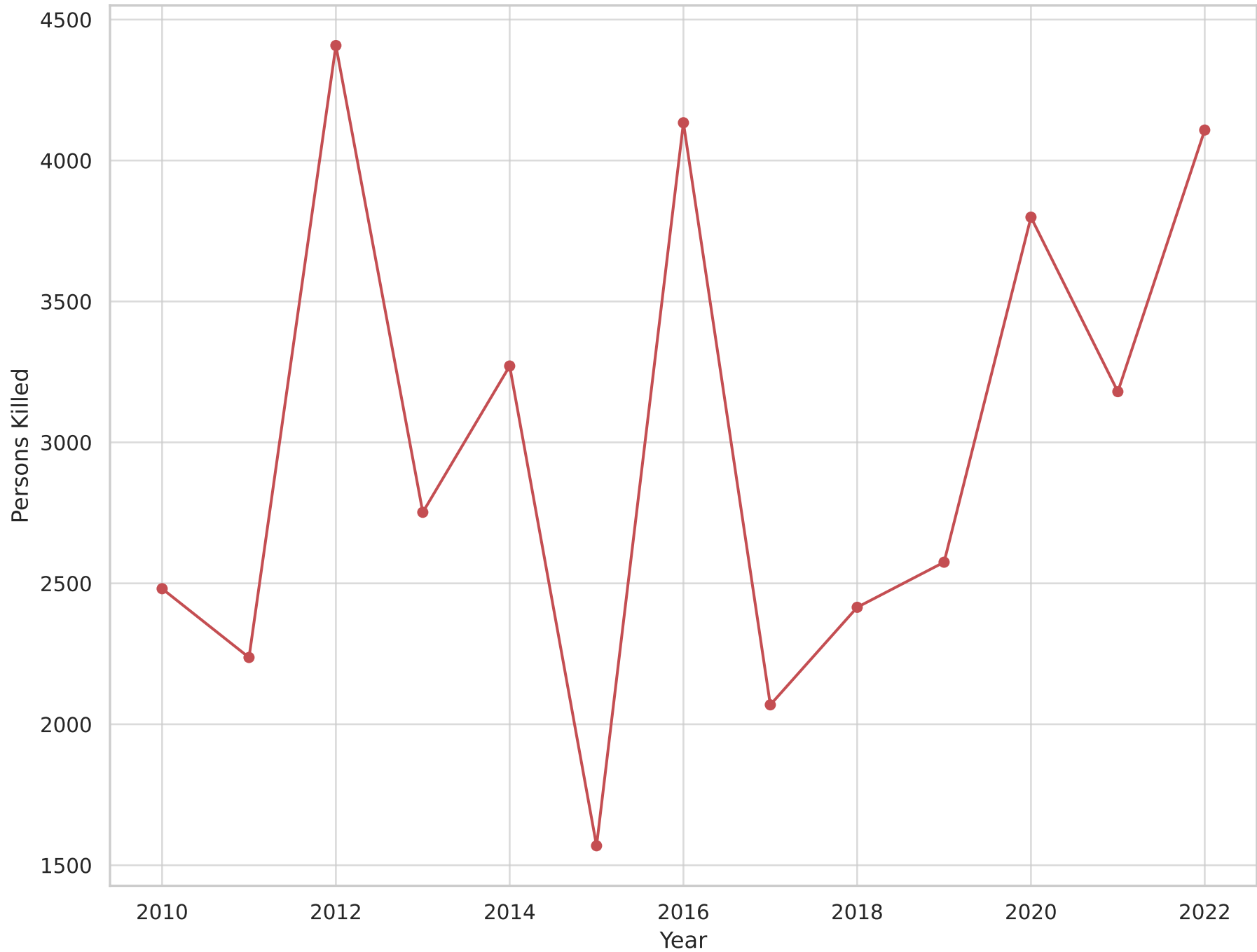
Total Road Accidents in India (Sample Data)



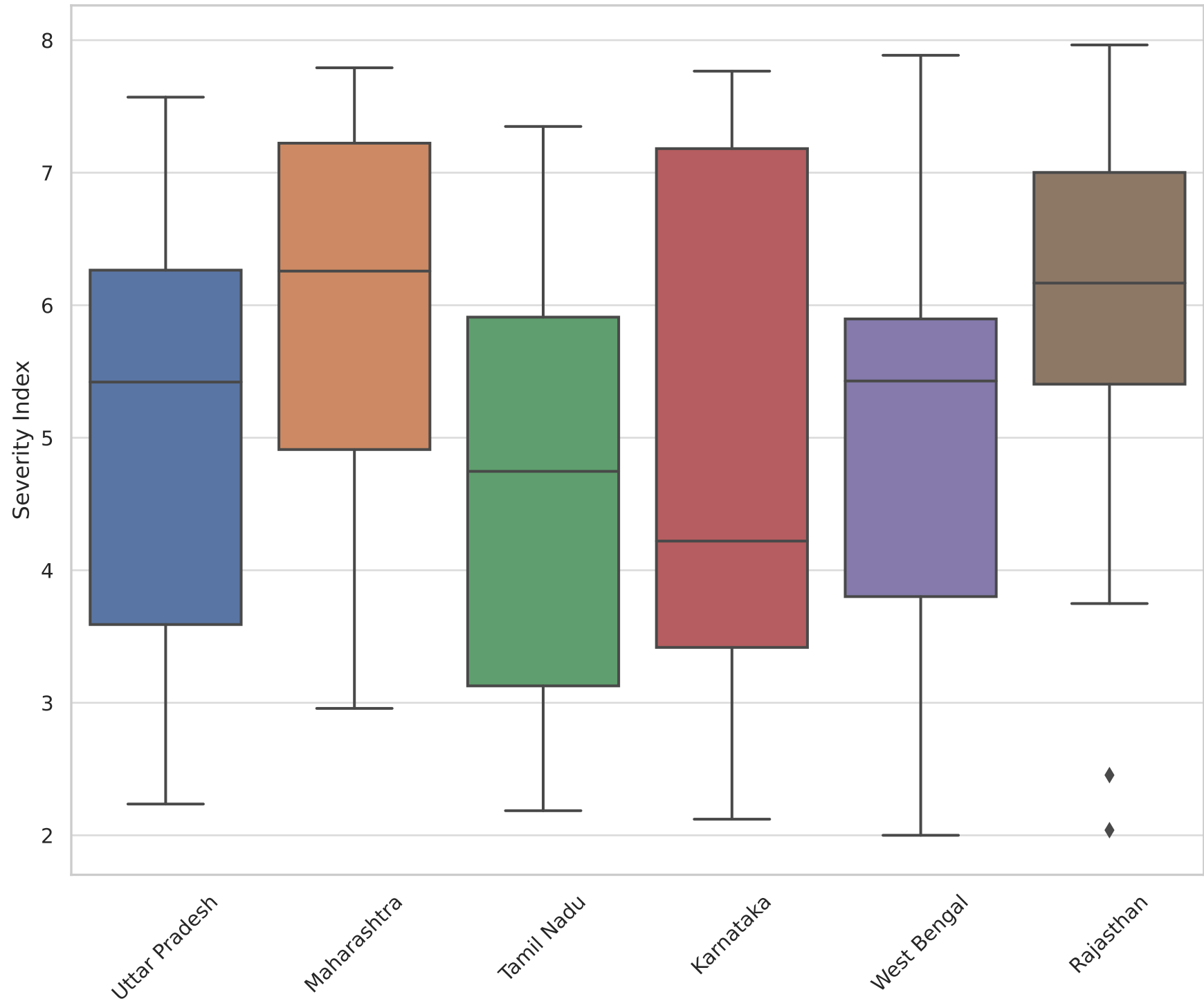
Total Accidents by State (Sample Data)



Persons Killed Over Years (Sample Data)



Accident Severity Index by State (Sample Data)



Key Findings (from sample data):

- Sample data shows a mild upward trend in total accidents (synthetic sample).

Findings & Future Work

- Frequency of persons killed per 100 accidents varies by state.

- Top states in sample: West Bengal, Uttar Pradesh, Karnataka, Tamil Nadu, Rajasthan, Maharashtra

Future Work:

- Replace sample CSV with real Kaggle dataset (e.g., Road Accident Data 2001-2022).

- Perform GIS hotspot mapping and time-of-day analysis.

- Build ML models for hotspot prediction and risk scoring.