

# **ABSTRACT**

Road accidents are the main cause of deaths across the world. Our aim is to evaluate main factors contributing to the road accidents like causes, weather conditions, time of the day, type of location etc and develop a model that performs data mining on the collected data. The data is collected from various open government data platforms. Data is preprocessed to remove missing values and performing feature selection to obtained required dataset. Clustering is performed on the dataset that is used for risk estimation. It is performed to predict accident risk values in terms of low and high for various locations of Bengaluru and classifying them into low and high accident zones. Association rule mining is applied in order to find interesting patterns within the data. Reporting of accidents will help to gather details about the accident data that can be used for further data mining. The interpreted results are then stimulated and visualized using python. Based on the visualizations and interpreted results one can provide various solutions as how the accidents can be reduced.

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