

Road Accident Severity Prediction using Machine Learning

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Abstract: Road accidents have become a major concern globally, causing a significant number of fatalities and injuries every year. The aim of this project is to predict road accidents severity using machine learning techniques, in order to reduce their occurrence and mitigate the associated risks. The project uses data collected from various sources such as accident reports, weather conditions, and road infrastructure to train and evaluate various supervised learning algorithms and predict the accident severity. Four algorithms were compared, including Decision Tree, Naive Bayes, Random forest. Most probably occurring road accident locations are identified and that particular region is indicated as black spot. The proposed method can be used to provide real-time risk information to road users, helping them to make informed decisions and avoid potential accidents. The project highlights the importance of using machine learning techniques in road safety analysis, providing a foundation for further research in this field.

Keywords: Road accident severity prediction, Machine learning Algorithm

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