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Accident Severity Prediction using Machine Learning

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Abstract: Traffic accidents are among the most critical issues facing the world as they cause many deaths, injuries, and fatalities as well as economic losses every year. Accurate models to predict the traffic accident severity is a critical task for transportation systems. This investigation effort establishes models to select a set of influential factors and to build up a model for classifying the severity of injuries. These models are formulated by various machine learning techniques. Supervised machine learning algorithms and unsupervised machine learning algorithms are implemented on traffic accident data. The major objective is to discover the correlation between different types of the traffic accidents with the type of the injuries. The findings of this study indicate that the unsupervised learning techniques can be a promising tool for predicting the injury severity of traffic accidents.

Keywords: Accidents, Supervised machine learning

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