**ABSTRACT:**

The invention is based on the classification algorithm, that is logistic regression, which is used for predicting the severity of a traffic accident based on various input parameters such as weather conditions, road type, vehicle type, location, and other similar parameters and a prediction modeling method thereof.Logistic regression is a fundamental classification technique. It belongs to the group of **linear classifiers** and is somewhat similar to polynomial and [**linear regression**](https://realpython.com/linear-regression-in-python/). Logistic regression is fast and relatively uncomplicated, and it’s convenient for us to interpret the results. Although it’s essentially a method for binary classification, it can also be applied to multiclass problems. The input parameters by the user will be label encoded and fed into the trained model, which predicts the accidents severity. The output of the accident severity then can be used to interpret the situation of the accident and also predict the future outcomes.