IBM DATA SCIENCE PROFESSIONAL CERTIFICATE
CAPSTONE PROJECT REPORT

Introduction/Business Report

As the number of road users increases, so too is the risk of accidents happening on the road. Using artificial intelligence techniques, our report aims to challenge this trend by creating a prediction model that is able warn of future accidents based on key variable identified variable factors. We hope that our model will assist drivers to eventually meet their loved ones safely.

Data

We found the data set example supplied in the course to be sufficient for our project as the number of cases was sufficiently large at about n=200K. To build our model, we will split this data accordingly into training and testing sets. We aim to use weather, road conditions and lighting conditions to calculate if the severity of the accident is to property only or causes an injury. These variables have been chosen for our study as they are relevant for our study context, their datasets are relatively complete in the data file, and the use of these few variables will create a relatively parsimonious model that can be understood by all stakeholders.