

The purpose of this report is to generate a machine learning model to predict the severity of an accident given a number of analysable attributes.

Insurance companies may need to determine how many agents to have available during certain weather conditions. If they can accurately predict what influences the frequency of and severity of vehicle accidents, then they can appropriately assign agents. In addition, they can quickly estimate the cost of the insurance claim based on the expected severity. Not only this, but emergency responders can be better prepared, both mentally and physically, and respond accordingly if they know what to expect before getting to the scene of the accident.

We focus on a dataset of car accidents. Within said dataset, we focus on the weather, junction, pedestrians, collision type and its description, light, road condition, and vehicle count to predict the severity of an accident.