Predicting the Severity of Traffic Accident

Bowen Deng

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Introduction

Transportation is a very important part of our lives. People have many transportation options available to them, and usually many people also choose to drive their own cars. Maybe it's a sunny weekend and you want to visit friends and family; or maybe it's a workday business trip to somewhere.and on the way, you encounter a terrible traffic jam where the long queue of cars on the other side of the highway can barely move. As you continue driving, police cars begin to appear from the distance, shutting down the highway. Oh, it's an accident, and a helicopter is transporting the people involved in the crash to the nearest hospital. They must have been in critical condition for all this to happen.Traffic accidents are hard to predict, but they are endless.

Problem

Now, what if something could warn you, given the weather and road conditions, of the possibility of getting into a car accident and how serious it could be, so that you could drive more carefully and even change your trip. Wouldn't it be great if the above predictions could be made. You would be able to keep yourself safe and avoid experiencing traffic jams. So this is the problem that this subject is trying to solve.

Target Audience

The intended audience for this project will be the Department of Transportation ,Traffic Radio, Navigation Software.Due to the danger of vehicle collisions, providing solutions that may reduce the amount of accidents can significantly improve the quality of life of pedestrians & overall ensure public safety.

Data

Now here's a huge data source obtained that I believe we can use to construct supervised learning models in machine learning, such as using features: location,Road Condition,Weather Condition,Function,Car Speeding,Number of people The data is then used to match realistic predictions of whether and what kind of traffic accidents are likely to occur. Most importantly, it contains a severity code that ranges from 0 (unknown) to 3 (fatality). Being able to use the various features within the dataset to better predict this the level of severity of the collision.