

Just Code It – Problem Statement 4

Driver Profiling and Accident Hotspot Prediction

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The datasets of Bangalore and Ahmedabad contain information such as coordinates, speed, and the location name besides the vehicular movements as observed. Given that anyone on this planet uses roads, it comes with intuition that additional information could be beneficial to build a robust prediction model. To do so, we aim to expand our dataset by adding more attributes such as weather conditions and the existing infamous accident hotspots of the city. It would also be useful to have data about potholes in the given plying routes. The idea behind our model requires a set of labels that are missing from the given datasets. Therefore, we propose custom labeling that could lead to accident given the set of attributes and its scenarios. The custom labels are high and low, and they correspond to the likelihood of an accident taking place after profiling the drivers with the available features. We propose to use different machine learning algorithms on the datasets and thus come up with the best performing ones to therefore predict accident hotspots.