TECHNICAL REPORT

ACCIDENT LOCATIONS ON INDIAN ROADS

AUTHORS: Sharath, Chandra Shekar and Akhil

TEAM NAME: SPIRIT

DATE OF SUBMISSION: 15/07/2023

Abstract

The Accident locations on Indian road aims to address the accidents and fatality rate all over India. It is one of the major project to identify the "Black Spots" (An 500m area where the most frequent number of accidents are occurring) and guide the people about that locations. By this the traffic officials can able to get to know about those particular locations and they will analyse and they will take a step to avoid accident further. In this project data collection and mapping are two important tasks, by those we can able to locate those block spots and mark them clearly. This project involves in avoiding the accidents and decreasing the fatality rate.

Introduction

Road accidents pose a significant challenge to public safety and health in India, resulting in a high number of fatalities, injuries, and economic losses. As the country's population and vehicle ownership continue to grow, understanding the locations where accidents are more likely to occur is crucial for developing effective road safety strategies and mitigating the impact of such incidents. This technical report aims to provide a comprehensive analysis of accident locations on Indian roads, examining the factors influencing their occurrence and proposing recommendations for improving road safety.

The Indian road network is vast and diverse, it is difficult to manage every locations by authorities, that's why people has to know about the black spots and so that they can aware of it and manage themselves to avoid such accidents.

For that intel took initiate and started working since so long and marked many locations and submitted to authorities, in this the mapping and data collection is very important, after collecting data like the actual black spot, it's latitude and longitude, nearby hospitals and etc. Once the data is collected, the next part will be mapping, for that there are many applications and software. This project main moto is to stop the accidents and decrease the fatality rate as much as possible.

Motivation Behind the Project

Nowadays as the count of vehicle is increasing, the rate of accidents also increasing, many people lost their lives. Every year, approximately 1.5 lakh people dies on India roads, which translate, on an average, into 1130 accidents and 422 deaths every day or 47 accidents and 18 deaths every hour. To avoid this, people have to know the dangerous areas like black spots and they need to be careful at those particular area. This project helps to reach out the people and inform them about those locations.

Data Source and Work

We took Hyderabad as the main city to mark the black spots. The black spots which we identified as follows:

Bowenpally check post

Amberpet T Junction

Bollaram check post

Osmanguni

Tankbund Arch to Dialing Club

Begumpet Flyover

Suchithra Junction

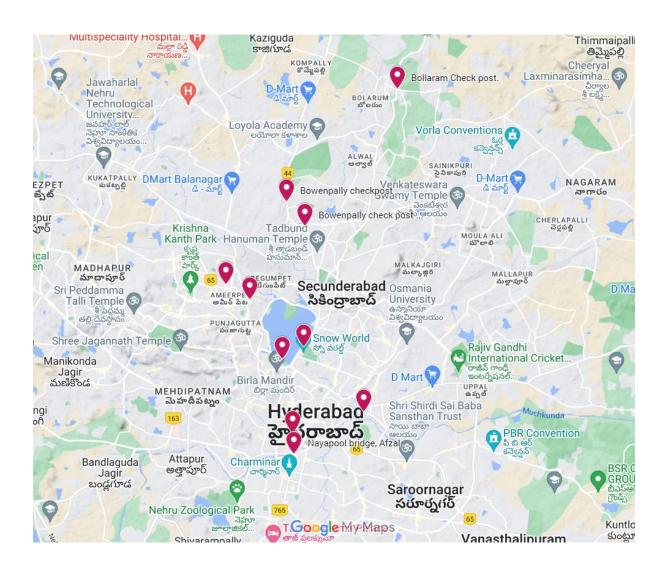
Nayapul Bridge

NTR Marg

V.V. Statue circle.

We have collected the data from Hyderabad Traffic Police website and made a excel sheet to represent the locations. To find latitude and longitude we used Google maps and lat-long finder website and also we used google sheet extension called ezGeocode. With those websites we collected data and saved as excel sheets. After that we used Google My Maps, one of the best and user friendly software to for mapping the locations. We imported the excel sheet into the Google My Maps and located the places. There are many hospitals nearby of those particular black spots we marked, it's even easier to see the nearby hospitals in Google My Maps. We referred the website called MORTH, which is the central website for giving the information about roads and road accidents. Google My Maps only required the excel file to import the data. We founded 10 black spots in Hyderabad and marked with red colour which indicates the danger signal.

Result



References

We collected the information from following websites:

- 1. https://www.htp.gov.in/ which is also knows as Telangana Traffic Police for identifying black spots
- 2. https://morth.nic.in/ it's a central website called MORTH for identifying black spots
- 3. https://www.latlong.net/ this website useful to show the latitude and longitude of those locations

Links of the result:

Result model link:

 $\frac{https://www.google.com/maps/d/u/0/edit?mid=1gcn_GdOVw7e3YCt6khi1Mzmvx_sUgsA\&usp=sharing}{}$

Github link: https://github.com/Sharathchintu3/IntelUnnati Spirit.git