Rider Assistance system for two wheelers

Abstract

Traffic Collisions are the Major sources of deaths, injuries & property damage every year. The three highest total number of fatalities were reported in Uttar Pradesh, Maharashtra and Tamil Nadu, and together they accounted for about 33% of total Indian traffic fatalities in 2015. In last 5 years around **472,606 road accidents occured out of that 149,472 were killed & 477,331 were injured.** (**https://en.wikipedia.org/wiki/Traffic_collisions_in_India**)

Inspite of Covid and Lockdown there are 1.2lakh road accidents in 2020 (**https://www.thehindu.com/news/national/12-lakh-people-died-in-road-accidents-in-2020-ncrb/article36557253.ece**)

Though there are many NGO's and MNC taking up initiatives on road safety awareness, still accidents counts are high.

This project is a small initiative to reduce the road accidents by helping the riders identify the blind spots which is one of the reasons for road accidents. We see a lot of rear cameras in 4 wheelers which help people to know what is there in front and back. But when it comes to 2 wheelers we don't see it. Though there is a lot of research going on, it has not come into existence.

Rider Assistance System for two wheelers -

- **To identify the Blind spots area for two wheelers by using a rear view camera and ultrasonic sensors that assist the riders about the closely approaching vehicles at the back. Which will give complete awareness about the road they travel**
- **Prior Art - There is little research that has been done on rear view cameras in mirrors of 2 wheelers and connecting that via software in mobile phones.**
- **Novelty (USP) - Unique selling point of this product is it comes with ultrasonic sensors which indicates the riders about the blindspots or vehicles behind which prevents collisions**
- **Description- To prevent the sudden collision and for safe driving rear camera comes with sensors which helps the riders to identify the blindpots & vehicles easily before 5to 10 mtrs**
- **Flow Diagram -**