

# **RA\_210**

**Problem Statement : Road Accidents in India**

**Abstract fo solution :**

**Some problems to which we found potential solutions are:**

- 1. People using mobiles :**
  - i. A software which locks the drivers' phone functionality while the car is in motion**

**2. Mechanical failures:**

- i. Software which performs a check every time the car is started to make sure all critical systems are working properly**

**3. Drunk driving:**

- i. An inbuilt breath analyser test which prevents the car from starting if the drivers' breath has alcohol content above the threshold**

**4. Driving on the wrong side of the road:**

- i. Inclined metal spikes at intervals of 50-100m which will puncture tyres of vehicles moving in the wrong direction while allowing vehicles moving in the right direction to pass over them will**

instill enough fear in drivers for them to not consider driving on the wrong side as an option

The major solution we will be looking at is self driving cars, as an onboard AI can take care of most human errors. However, these come with their own set of unique and different challenges.

**Ethics of a Self Driving:**

Among the major problems of self driving cars, is the moral rules it will follow on the road. The ethics of a self driving car will be very hard to develop. Developers will have to program cars to solve the trolley problem i.e. they'll need to be programmed to choose between the life of the passenger and whatever got in their way. When humans have to make this choice, they act based on instinct and make a decision in a split second which is why they cannot be blamed. These cars, however, will be programmed to act in a specific way by people who have all the time in the world to make the decision

One advantage Self driving cars have over humans is the

**emotional aspect , the self driving car can make a decision based on the situation and emotions wont cloud its thinking process.**

**Errors made by a self driving car:**

**AI can simultaneously be the smartest and dumbest thing. While the average number of accidents will decrease with self driving cars, errors they could make after software updates could lead to much worse accidents than if a human was driving.**