

VISHWAKARMA INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ENGINEERING SCIENCES AND HUMANITIES

EDAI PROJECT BATCH No:-2	EDAI PROJECT GROUP No:-I6	ACADEMIC YEAR 2022-23	SEMESTER-1
TITLE OF PROJECT	Alerting signal for Blind Turns (≤ 90 Degrees) / T Junctions		
DOMAIN	Smart city		
TOOLS	Proximity Sensors, Projector, Software Backup.		
TECHNOLOGY	Depth sensors, Speed Tracking, Projection		
NAME OF GUIDE	Amruta Bhawarhi	Roll Numbers: - 30,31,32,33,34,35	

SYNOPSIS

IMPORTANCE OF THE DECIDED PROJECT (2/3 LINES): -

- Today many accidents take place due to carelessness while driving vehicles. May it be the carelessness of any one person, it can damage many people at once.
- Such an instance where the chance of occurrence of a terrible accident is very high is blind turns.
- Generally, we announce our approaching vehicle by using horns or headlights and we tend to slow down, but it is observed that careless drivers don't pay attention to the turns and just don't announce their arrival at the turns which causes damage.
- So, a technology, where an approaching vehicle is announced by projecting it on the road will be a great option to help prevent these accidents.

STEPS TO DO THE PROJECT/ METHODOLOGY (7/8 LINES): -

- We will place 3 proximity sensors near the entrance of a turn.
- The proximity sensors will detect the approaching vehicle and send a trigger.
- The time, the vehicle takes to cross the 3 proximity sensors, based on the distance we can measure its speed.
- We will project the signal on the other part of the turn about the vehicle's arrival.
- We can signal the vehicle using a basic traffic signal, or project the details about it on the road itself.
- The projection will display the notification of the vehicle's arrival and the speed of the vehicle.
- Thus, both drivers will be alerted about the arrival, which will alert them, and eventually, the drivers will slow down.

TENTATIVE EXPECTED RESULTS FROM THE PROJECT (2/3 LINES): -

- The speed of the vehicle will be calculated which we can further use in alerting the other driver.
- Both drivers will be aware of vehicles' arrival, causing fewer accidents.
- Even careless drivers, after acknowledging the approaching vehicle, will thus slow down.