Implementation of Collision Avoidance System for Hairpin Bends in Ghats Using Proximity Sensors

Sarthak Bajirao Mhaske[1], Anupam Bhagvan Katale[2], Sushant Somnath Bodke[3],
Sanket Bharat Jadhav[4], Prof. P. S. Kankrej[5]

Department of Civil Engineering[1-5]
Matoshri Aasarabai Polytechnic, Eklahare, Nashik, Maharashtra, India

Abstract: *People don't care enough to stay safe while driving on road. During a long travel accidents and deaths caused by them are the most serious issues now-adays. Research in this paper includes the main issues like ghat road accidents and their impacts, causes of this accident, effect of accident, preclusion and control so that we can improve this state. It is not safe now a-days to drive through the ghat areas while turning in the hairpin bends. The percentages of accidents in ghat sections are increasing day by day. Severity of these accidents is non reparable. So firstly it is important to control this situation and have some safety measures in hairpin bends. This paper includes some solutions and ideas to improve protection in ghat sections. Hairpin bend accidents occur mostly because of the driver unable to see the vehicle coming from the opposite sides of the road curves. Our system uses sensors to detect any vehicles reaching hair pin bend and alerts immediately on other side vehicles by red signal and also producing alert sound. If hair pin bend road is clear green signal is produced. Thus this system provides safety for drivers to prevent hill side accidents and ride safely in hill side roads. Often modern cars have a collision avoidance system built into them known as Pre-Crash System, Forward Collision Warning System, or Collision Mitigation System in order to reduce the severity of a collision*

Keywords: curve roads, accident prevention sensor, mountain road, hill roads, ultrasonic sensor, alerting the driver.,

Copyright to IJARSCT
www.ijarsct.co.in

DOI: 10.48175/IJARSCT-25607

42

ISSN
2581-9429
IJARSCT