

Design and Development of Driver Assistance System

Dr. H. Chidananda¹, Shivasantesh Dodawada², Sarala Eshwar³, Shabaz Ali⁴, Vishwanath K⁵

Assistant Professor, Department of CSE¹

Students, Department of Computer Science and Engineering^{2,3,4,5}

Rao Bahadur Y Mahabaleswarappa Engineering College, Bellary, Karnataka, India

Abstract: *Advanced Driver Assistance Systems (ADAS) are intelligent systems that reside inside the vehicle and assist the main driver in a variety of ways. ADAS are intended to help the driver in his driving activities. Technological solutions are many, like Adaptive Cruise Control (ACC), Intelligent Speed Adaptation (ISA) or Collision Warning Systems (CWS). When designed with a safe Human–Machine Interface (HMI), an ADAS should increase vehicle safety and comfort. These systems may also be used to provide vital information about traffic, closure and blockage of roads ahead, detect objects beneath the vehicle, to judge the fatigue and distraction of the human driver and thus make precautionary alerts or to assess the driving performance and make suggestions regarding the same. The greatest advantage of using the assistance systems is that they enable communication between different vehicles, vehicle infrastructure systems and transportation management centres. This enables exchange of information for better vision, localization, planning and decision making of the vehicles.*

Keywords: Advanced Driver Assistance Systems

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