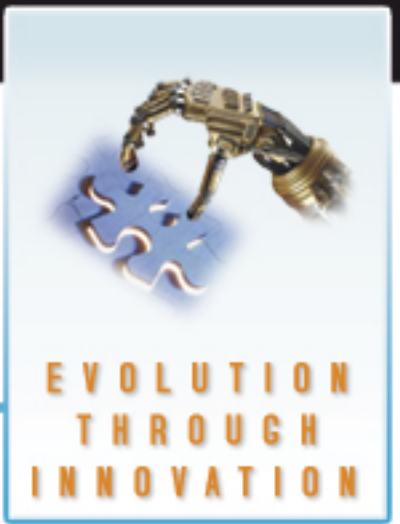


# AUTOMATED DRIVER ASSISTANCE SYSTEM



## INTRODUCTION

HRS has developed core technologies in the areas of algorithms and ASIC architecture design for monocular video processing supporting applications of Adaptive Cruise Control (ACC), Lane Departure Warning (LDW), Lane Change Assist and Blind Spot Detection (LCA/BSD), Pedestrian Protection and in-cabin Occupant Detection.

HRS offers a complete range of vision applications for driver assistance and for safety related applications. The complete vision system for driver assistance applications consists of the processing unit and a configuration of sensory inputs ranging from a single (monocular) camera sensor, fusion of multiple cameras with varying fields of view and fusion between video cameras.

## FEATURES

- Drowsiness Detection System
- Lane Detection System
- Lane Tracking System
- Lane Departure Warning
- Collision Warning and Obstacle Avoidance System
- Vehicle Detection and Classification System
- Pedestrian Detection System
- Back Mirror Controller System

## BENEFITS

- Accuracy
- Cost-Effective
- Familiar
- Non-Invasive
- Does not require User Participation
- Built in live data Mechanism
- Efficient

**Hi-Tech Robotic Systems** Auto Driver Assistance System



This is the Demo Video of the Product Under Development by Hi-Tech Robotic Systems. This Product is sole property of HRS. This Product can be used in all Vehicles for providing driving assistance and safety precautions. It is completely based on vision technologies where cameras located in the car, can be used to inform the Driver about lanes as well as monitor his/her status, in terms of whether he/she is awake and looking at the road.

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Drive Safe, Follow Traffic Rules, We Care about your Safety

Live Camera



Looking Straight

The video sequence shows the detection and tracking of vehicles, pedestrians, lanes, along with distance to other vehicles, Driver Drowsiness and Gaze Information.



## PRODUCT CONCEPT

- A drowsy driver detection system, that would detect early signs of drowsiness and provide a warning to the driver.
- Lane detection Tracking & departure System - Incorporates lane detection capabilities, measures position of the vehicle relative to the lanes, and provides Indications.
- Crash avoidance system, that would warn the driver of impending collisions and it would sound an alert if the vehicle appears to be running off the road.
- Object recognition and classification - Incorporates Vehicle Detection and Recognition Distance calculation - measurement of range, range rate, and azimuth to vehicles.



## SPECIFICATIONS

	Wide FoV(50°)	Narrow FoV(24°)
Target Tracking Range	0-110meters	0-220meters
New Target Detection Range	5-60 meters	5-110 meters
System Operation Frequency	30 Hz (30 frames per second)	

