ITSP 2014

Group members--

1. Akash Garg --130070060

2. Amit Laxman Waghmare --130070011

3. Manish Meena --130070017

4. Siddhant Dhabale --130070013

ITSP project ideas--

Autonomous Driving Vehicle

Implementation steps--

#our autonomous driving vehicle will take the help of image processing for object detection .

#that data from images will be processed in appropriate software to form the path of the vehicle.

using infrared rays and detectors to detect position of the obstacles ,

measure their speeds .(15days)

#program to read the data and send the result to another program that

dictates motion of the bot.(7 days)

circuits and programs to avoid obstacles and reach the destination.(10

days)

designing the body of the vehicle considering all the mechanical

aspects so as to keep it as small as possible.(5 days)

Components Required and their price estimates--

#infrared sensors and detectors

#basic circuit of a bot

#chips to transform the program output to bot motion.

#mechanical components of the bot

Learning Outcomes—

#good practice with image processing and programming required for image processing.

understanding of the circuits and mechanical aspects of a vehicle.

#understanding the optimization of reaction time of vehicle

#reprogramming the movement of the vehicle during motion

#using the infrared detection technique of bats to understand the type of

object in front

ADDITIONAL objectives-

We will try to explore the concept of detecting whether the object in front of vehicle is a human or vehicle or some non-living object . if we are able to determine the kind of object in front of vehicle then we will further use this concept to make the journey more better. This will ultimately lead to complete replication of human driving.