

MICROCONTROLLER BASED LOW COST AUTOMATED VEHICLE

M. Ammar Nasir (G.L), Waseem Akram (A.G.L), Abdul Rehman (Member), Mubashar
Adeel (Member), Junaid Ahmed (Member), Javed Ali (Member)

Supervised by:
Zuhaib A. Shaikh

Abstract:

Autonomous transportation is a necessary aspect where different solutions are available by considering low cost and less human efforts.

This project focuses on these issues and provides a solution based on microcontroller along with Neural Network. The vehicle is equipped with ultrasonic sensor for hurdle distance measurement, a sub-controller for storing waypoint data connected with AT89C52 microcontroller. The microcontroller process the acquired information from interfaced components and generates robot motion commands using neural network.

The project provides a robust and low cost solution for autonomic transportation which can be implemented to address the requirements easily and effectively.