

CAMBRIDGE INSTITUTE OF TECHNOLOGY

DEPARTMENT OF AI&ML

INTUIT'22

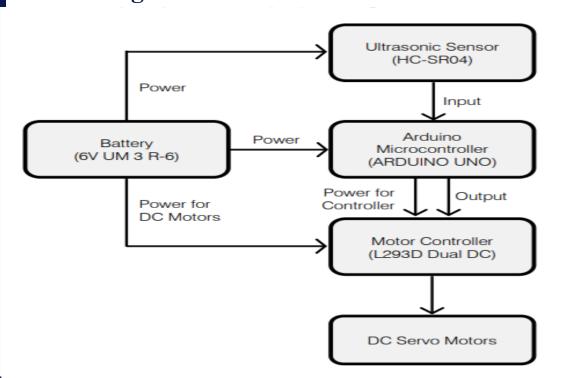
Project ID:

TITLE: OBSTRICAL SENSING ROBOT

Brief Description of Project:

This project developed an obstacle avoiding robot which can move without any collision by sensing obstacles on its course with the help of three ultrasonic distance sensors. Robots guided with this technology can be put into diversified uses, e.g., surveying landscapes, driverless vehicles, autonomous cleaning, automated lawn mower and supervising robot in industries.

Block Diagram/Architecture



Applications:

- —> Obstacle avoiding robots can be used in almost all mobile robot navigation systems.
- —>They can be used for household work like automatic vacuum cleaning.
- —>They can also be used in dangerous environments, where human penetration could be fatal.

Outcome of the Project:

- The robot would have the capacity to detect obstacles in its path based on a predetermined threshold distance.
- After obstacle detection, the robot would change its course to a relatively open path by making autonomous decision.
- It would require no external control during its operation.
- It can measure the distance between itself and the surrounding objects in real-time.

Team Members (Nasme & USN)

Project Coordinator:

Prof Yashaswini S

Project Guide:

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