



# NARNARAYAN SHASTRI INSTITUTE OF TECHNOLOGY

(Department of Electronics & Communication)

Name: Kalpana Chiranjilal Mahawar (Enrollment no: 110340111048)

Contact No. 7405876301

Internal Guide: - Mrs Kinjal Kapadia

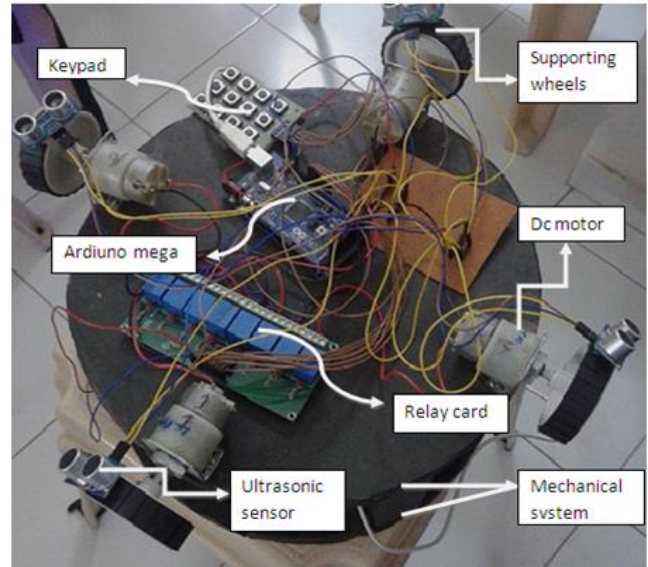
External Guide: - Priyam Parikh



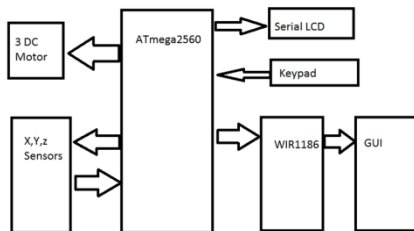
## Project Title: - Multiway Radar Tracking System

**Abstract:** - The MRTS System is a tracking system, as a major function of the Radar is. We have used Arduino ATmega 2560 controller for our system. We have used Ultrasonic Sensors of 2-5m range, which will detect the object in its vicinity. These Sensors are mounted on the Mechanical wheels which are rotated 45 degrees by Dc motors (10 rpm) in clockwise and anticlockwise directions to track the object in multiple directions. The output is displayed on the Matlab through wiridin 1186 (a wireless module), The position of the object will be displayed via Linear and Polar graphs.

### Project Photo: -



### Block /circuit Diagram: -



**Major Hardware components used:** - Arduino Atmega 2560, 4 Ultrasonic sensors (2 m range), 5 Dc motors (10 rpm), Relay card, Mechanical wheels, Wirdin 1186, 12 volts SMPS Battery.

**Software used:** - Matlab.

### Project Application: -

- (1) It is a small scale Radar Model for the purpose of understanding
- (2) For Radar Enthusiasts
- (3) People even with less technical knowledge can operate this system
- (5) Can be used as a Reference Model in Laboratories

**Approx. Project Cost:** - 8000 /-