Project Name – “CRWLR”- A wireless all terrain robot.

Problem Statement- To make a robot capable of traversing the toughest of terrains being able to drive when flipped upside down. while also having wireless control capabilities

Project Budget- INR 5000

Description-

Obstacle course was another common are for institutions to test the fortitude of a robot in. I had built a robot with big wheels which was light and agile. It slipped a lot and because it was wired it was inconvenient to control.

I designed a wireless version of the same, first I tried to use a 433mhz transmitter with an encoder decoder but I could never get it to work properly as it kept breaking connection, so I switched to Bluetooth before using a PWM Transmitter used in toy planes and cars.

So, using a metal box with a cover I mounted the components for wireless control which all fit nicely into a neat package.

For the wheels I used the biggest ones available on the market and used old timing belts of engines to stich two custom wheels which added a lot of traction

This robot went on to win a lot of awards.

Materials Consumed-

1. 1mm sheet metal.
2. Nuts/ Bolts/ Screws
3. Motor Clamps
4. 120 RPM Motors
5. Relay Board
6. Arduino Uno
7. HC06 Bluetooth Module
8. PDB
9. 2200mah Lipo
10. Custom made wheels.