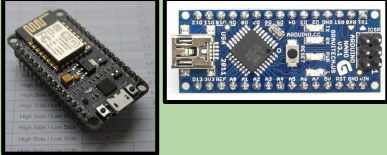# Stabilized Car MK I

1) Logic system

Controlled by 2 microcontrollers, the NodeMCU and the Arduino NANO. The Nano controls the gimbal and the NodeMCU controls the motors and the wifi connection.
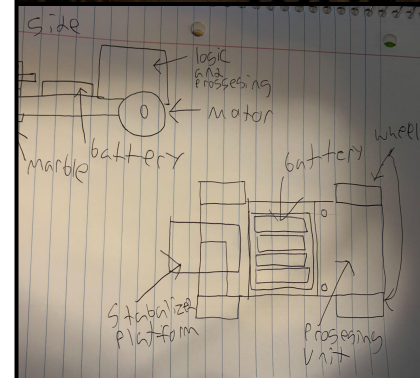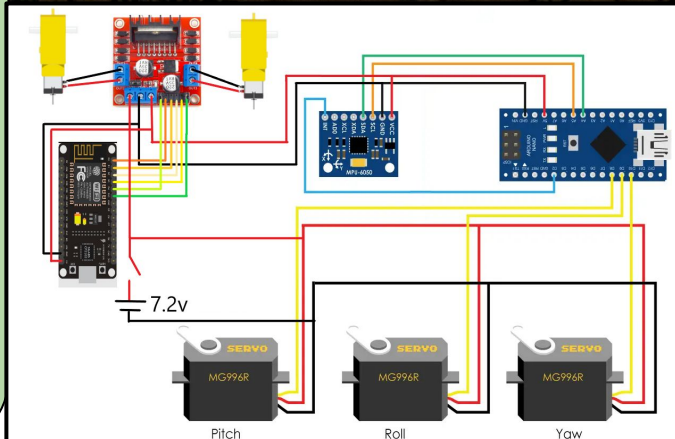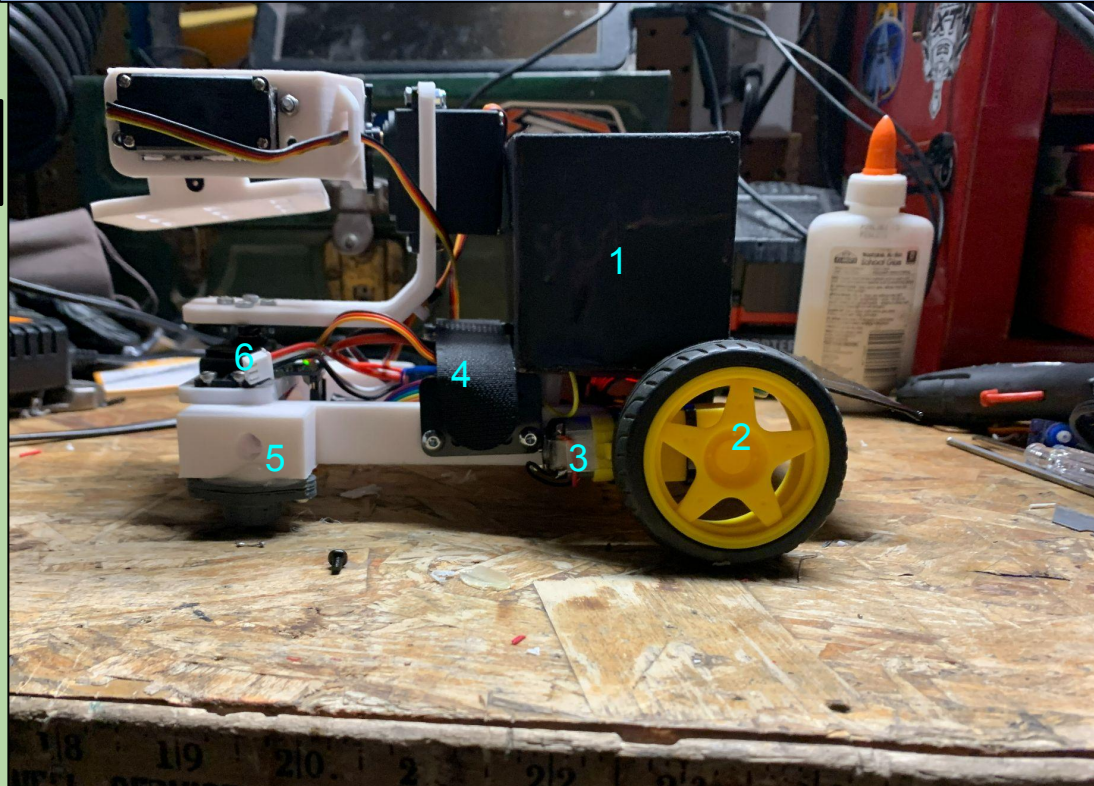

2) Wheels

The wheels are pretty simple plastic with rubber tires for grip. There is no steering on this with any mechanical method, instead we use tank steering with rollers in the front.
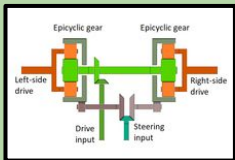
3) Motors

The motors we are using are simple 5v dc motors with a gearbox. The motors are controlled by an l298n motor controller

4) Battery

For this project I required a steady amount of amps in a small package and so the 7.2v Lithium Polymer battery I chose works perfect for the servos power draw.

5) 3d Printed parts

All of my frame and parts are either electronics or 3d printed and that's because of how easy it is to get a perfect part that fits with everything else perfectly.

6) Gyroscope

THe main feature of this project is the self stabilized platform on top of the vehicle. It uses a gyroscope to sense direction changes and move the servos to level things out. I took inspiration from camera gimbal mounts