

RC Car Project using ESP8266 and Servomotor



Introduction

In this project, I transformed a damaged RC car into a fully functional, remotely controlled vehicle using an ESP8266 microcontroller. Initially, the RC car's front wheels were unable to turn, which limited its maneuverability. The original toy motor responsible for steering was inadequate, so I replaced it with a servo motor to achieve precise control over the front wheels.

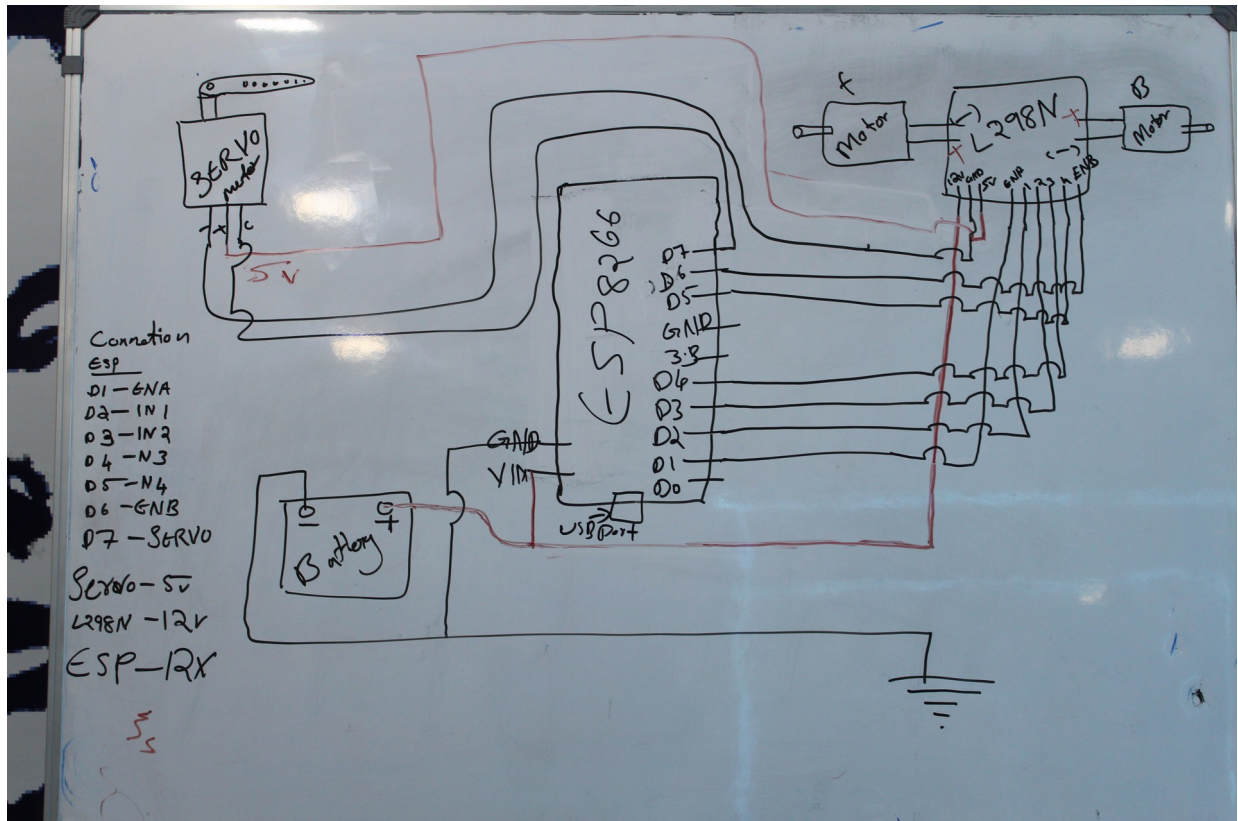
Upon inspecting the RC car's main board, I discovered that it was broken and could no longer support the vehicle's operation. To overcome this, I decided to utilize the ESP8266 microcontroller to take over the control functions. The ESP8266 is a versatile Wi-Fi module that allows for remote control via a mobile application.

I used a custom app designed for the ESP8266 to control the car's movements, which enabled me to operate the RC car from my smartphone. This modification not only repaired the car but also enhanced its capabilities, providing a more modern and flexible control system.

Components:

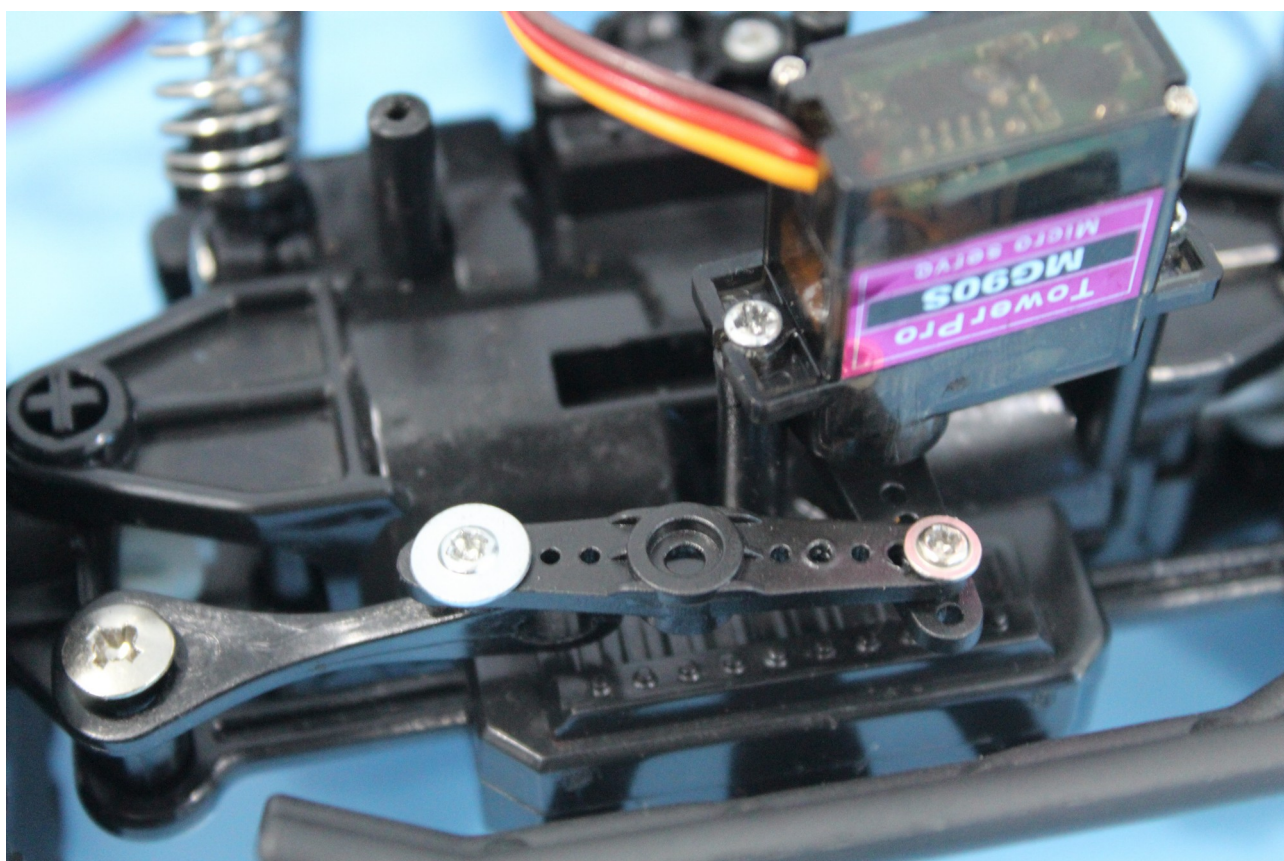
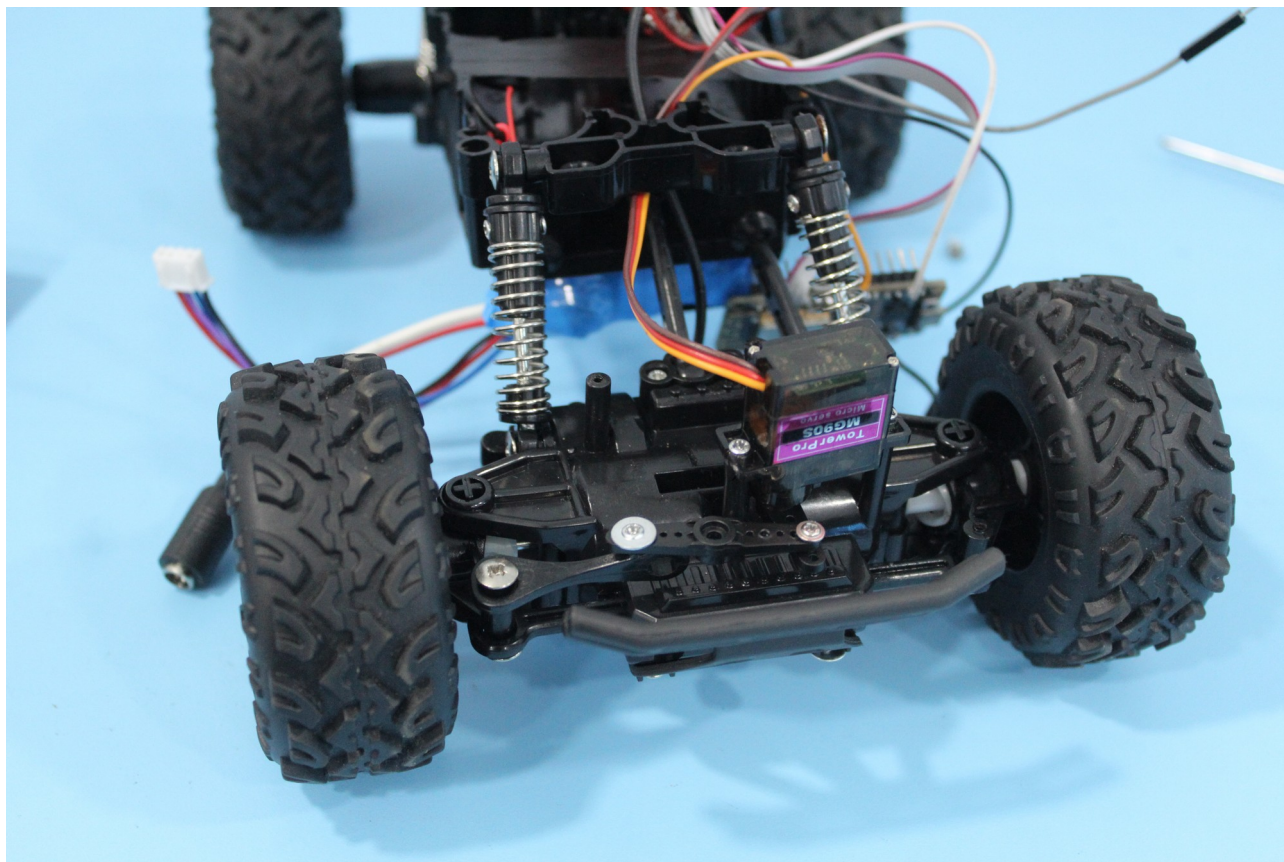
- List and describe all the components used in your project:
 - **ESP8266 Module**
 - **L298N Motor Driver**
 - **12v Battery**
 - **Servomotor**

Circuit Diagram:

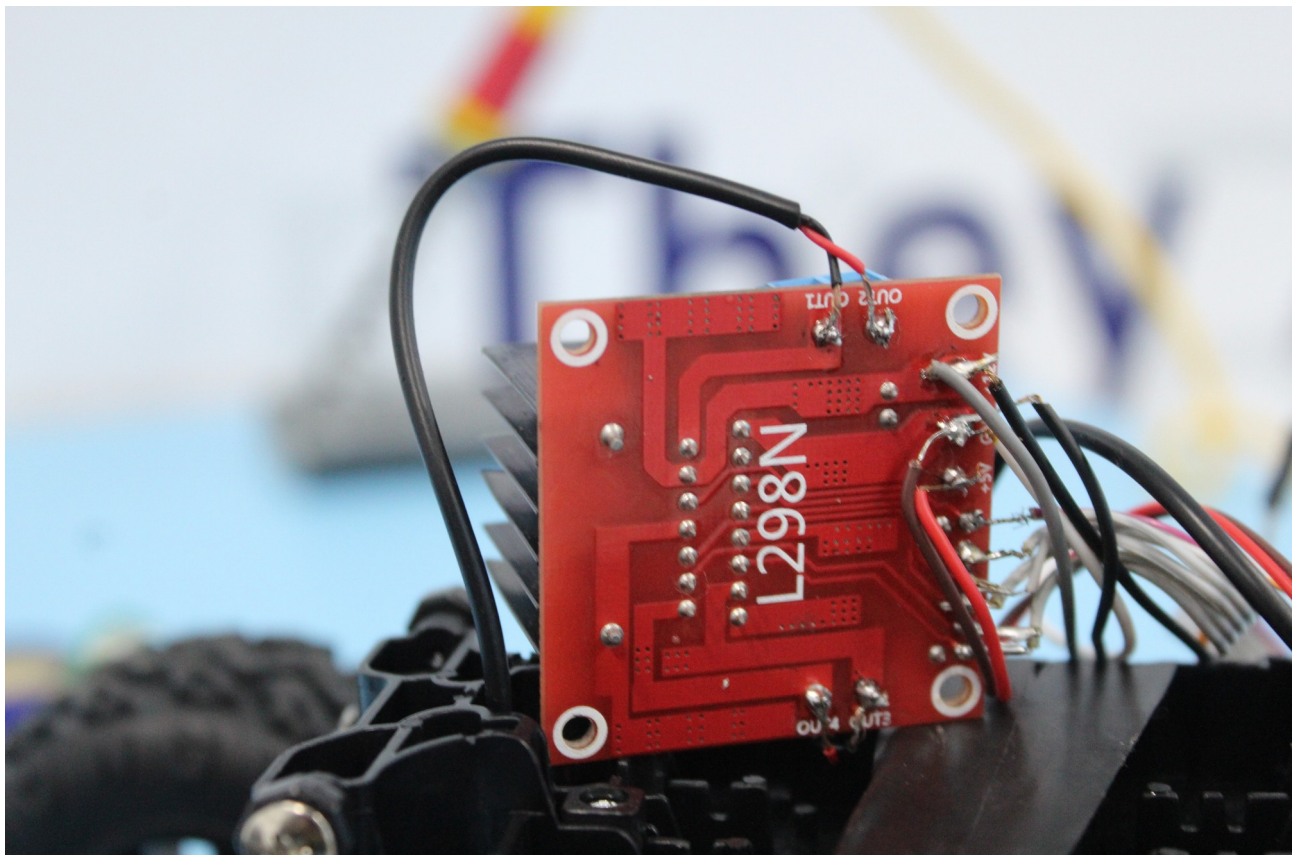
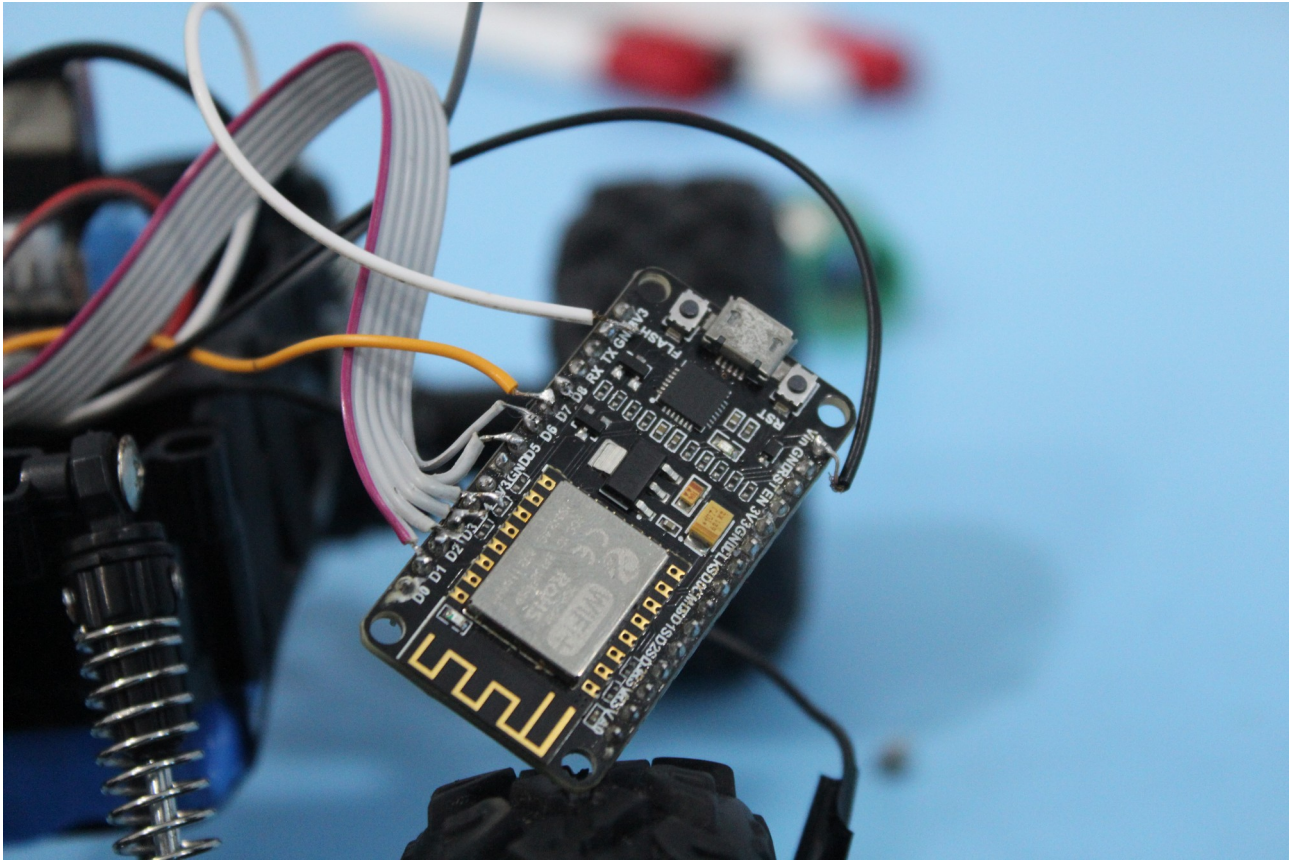


Code Explanation:

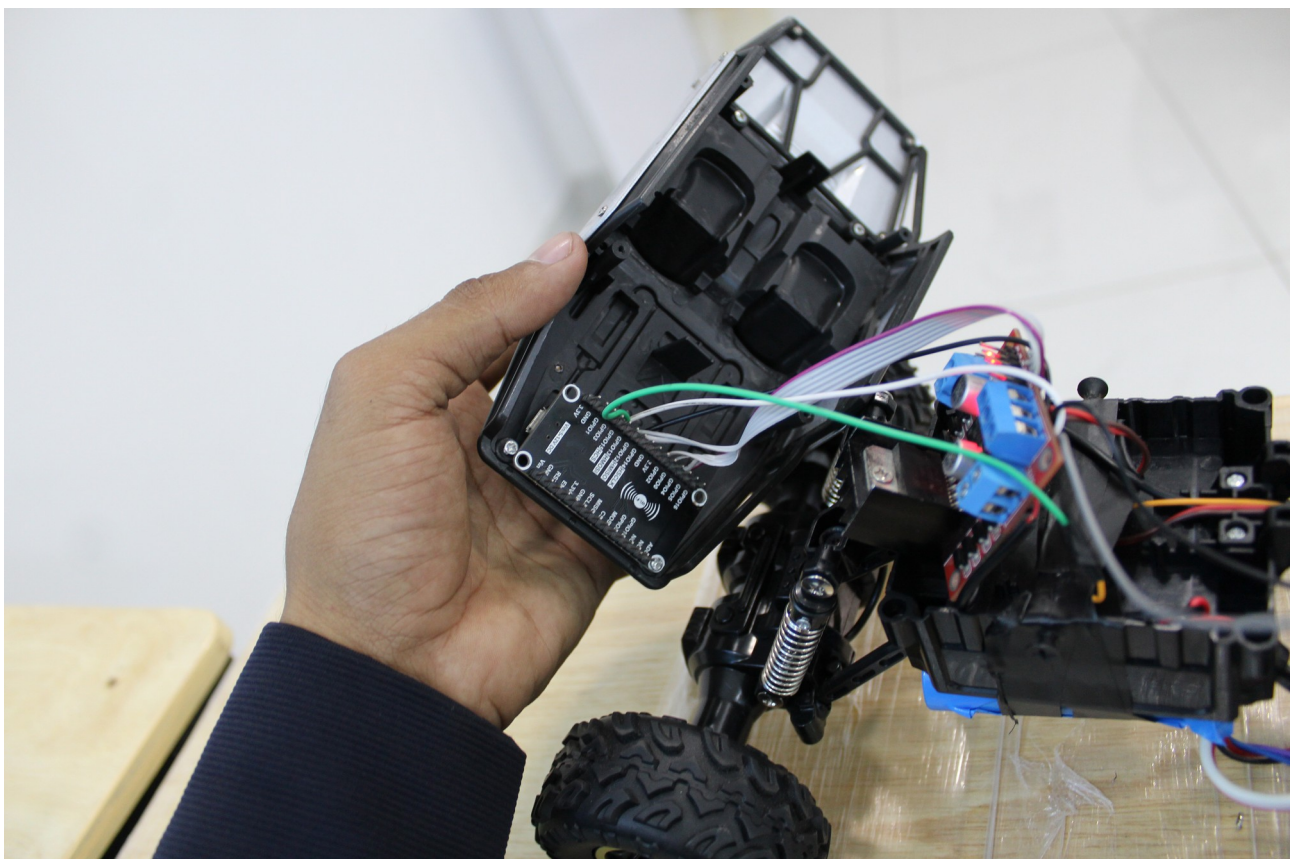
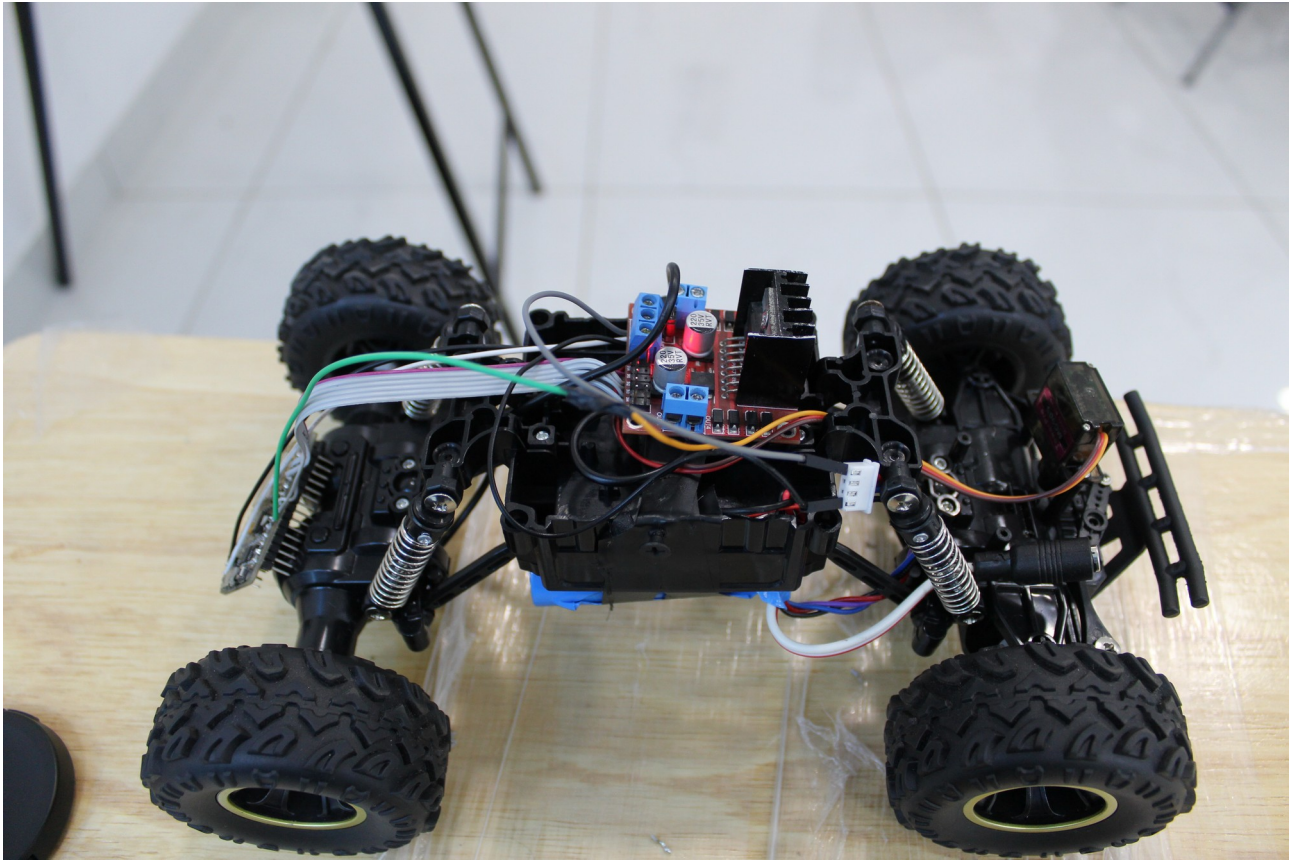
Setup:
1)fixing servo motor on rc car



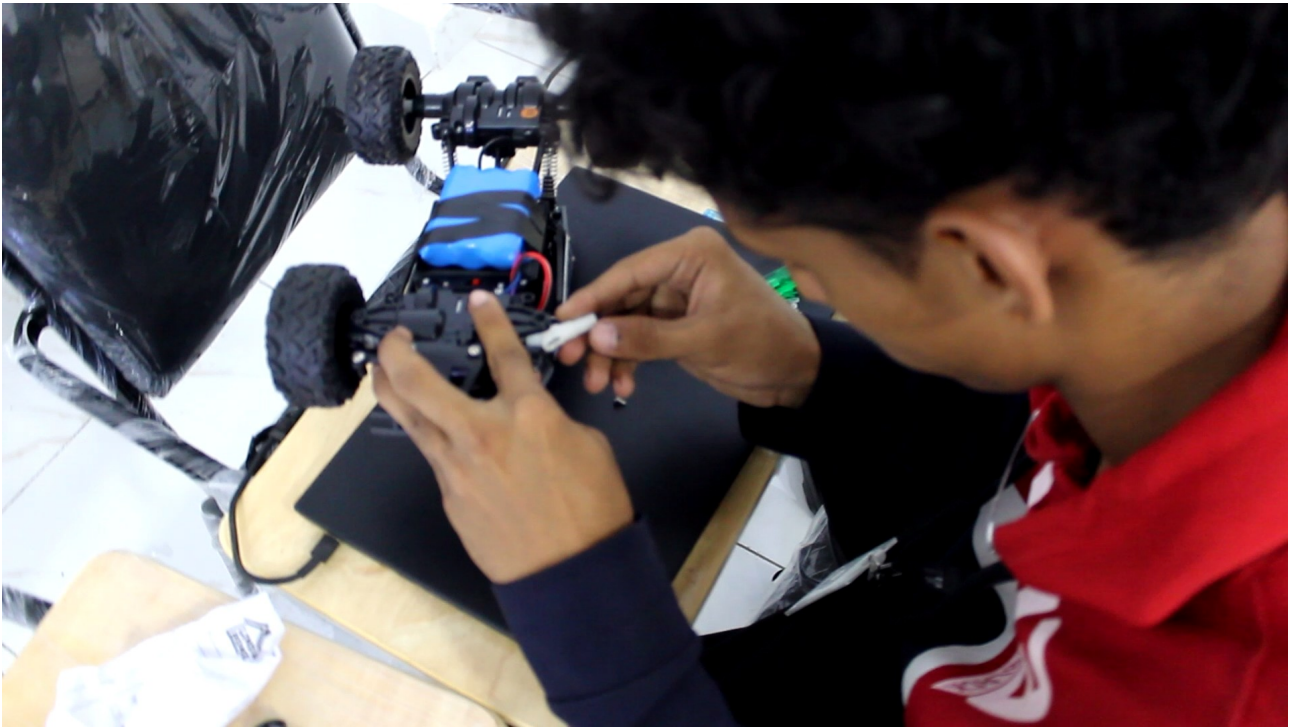
2)ESP8266 to L298N Connection:



Final output



code uploading



final all set.....(after 5hr time 3.23am)

