**Raspberry Pi Mini Radar Project Manual**

Author: Ziyuan Tang

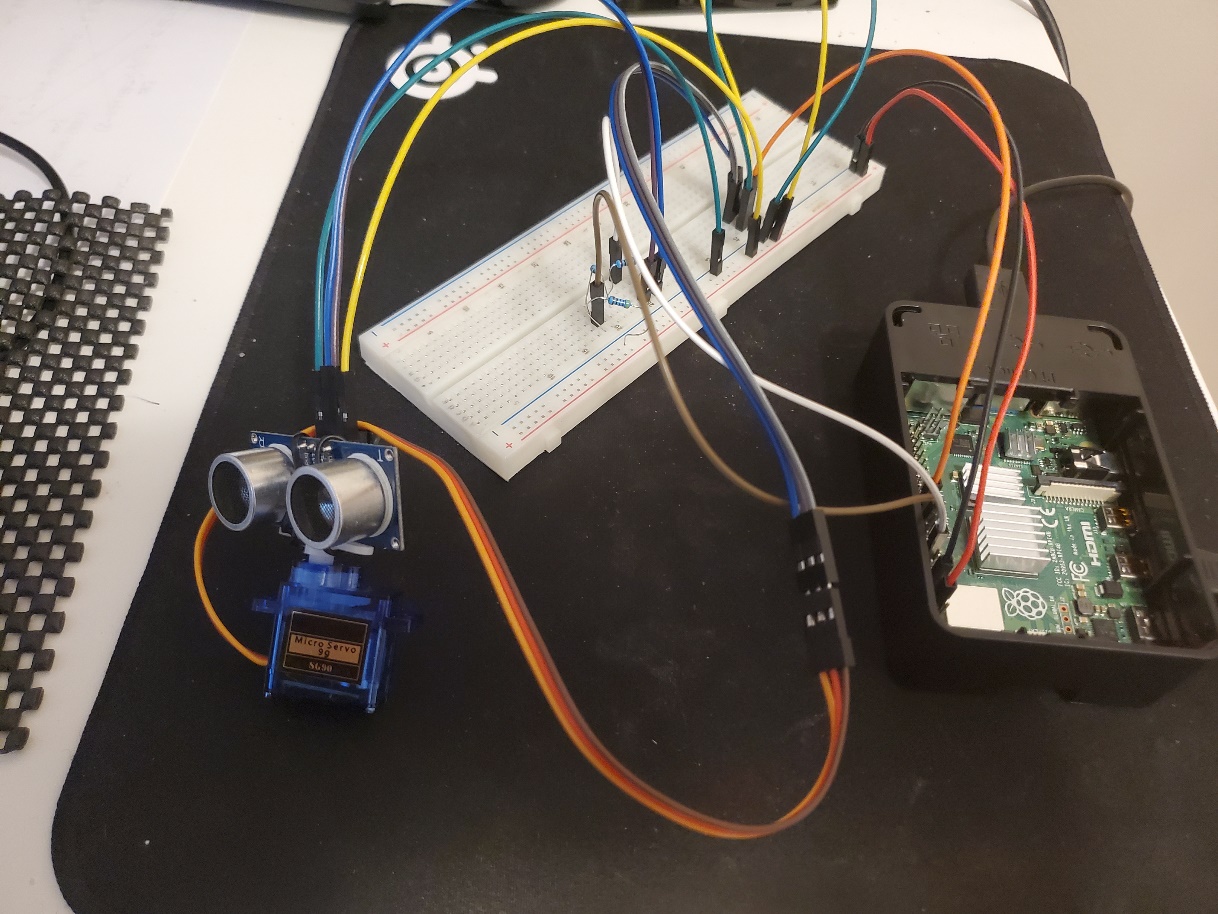
**Introduction**

This project is to connect Raspberry Pi with a HC-SR04 ultrasonic sensor attached on a servo motor to acquire a 2D positioning data and send data to thingsboard cloud to visualize data.

**How to Run**

1. Connect the servo motor and ultrasonic sensor with Raspberry Pi as shown in Apparatus.
2. Register a thingsboard account. Create a new device on thingsboard, get the token string of the device.
3. Copy ‘sensor.py’ attached in this folder and paste it in Raspberry Pi.
4. In ‘sensor.py’ change the ‘ACCESS\_TOKEN’ to your device token. You may also want to change the connected pin of servo motor and ultrasonic sensor.
5. On thingsboard, create a dashboard and add any widgets to visualize your desired data.

**Apparatus**

****