

TurtleBot3(Waffle Pi)





Overview

The goal of this project aimed to design and build a robot capable of autonomously following the dynamics of a leader. I worked together alongside my team to program the robot to follow a human. Basically, the follower in the leader-follower system, could track the trajectory of the leader without any collisions.

Hardware

Remote Controller(Bluetooth, BLE)
360 Degree Laser Distance Sensor(for SLAM & Navigation)
Sensors: Gyro, Accelerometer, IR Sensor, Motion Sensor, Distance Sensor

Software

ROS - Robot Operating System SLAM - Used for mapping