

Environment Operation Robotics หุ่นยนต์เก็บขยะชายหาดอัจฉริยะ

สมาชิก

65160134 จักรพงษ์ นามวงศ์

65160142 ภาณุวัตร สุขเกษม

65160410 เสกสันต์ สุขเกษม

Beach sand garbage collection robot development plan

- Robots can move freely on the sand.
- Robots can accurately detect and collect garbage.
- Robots can avoid obstacles.

Duration 8 weeks

The main equipment

- Distance sensor such as Ultrasonic sensor
- At least 2 cameras, such as RGB cameras.
- Car body, 2 motors, battery, nano board ESP32
- Garbage scooping equipment, motor
- GPS

Week 1-2

- Design and build a car that can be driven on the sand.
- Install an electric motor for driving.
- Install a garbage scooping device.
- Camera and electrical system

Week 3-4

- Develop Computer Vision system for Detect Objects
- Develop GPS system

Week 5-6

- Develop an automated drive system and avoid the sea.

Week 7-8

- Develop data sync systems such as Wi-Fi or Bluetooth.
- Develop Database and Dashboard system