CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY

Name(s)

Bryan Solis; Tyler Wakatsuki

Project Number

J0925

Project Title

Search and Rescue

Abstract

Objectives/Goals

This project is about building a robot that can efficiently and safely help recover humans or any other life forms from a disater

Methods/Materials

We used tape to make the track for the robot. We needed the receiver and camera to project the image on a television for the remote controlled robot. We used the television so we can control the manually controlled robot through the TV. The remote control we used for the manual controlled robot was a phone with an app to connect through Bluetooth so it controls the robot. We had a robotics kit called EV3 from Lego and we used that to build the robot. We used a laptop so we can program the robot for the automated robot.

Results

The results of this experiment was very one sided as the automated robot average time was 54.33. The first run was 44 seconds, second was 67 seconds, and the third 52 seconds. As for the manual controlled, it took Bryan 39 seconds on the first, 33 seconds, and lastly 35 seconds averaging out to 35.66 seconds. On the other hand Tyler took 32 seconds, 35 seconds, and 33 seconds averaging out to 33.33 seconds.

Conclusions/Discussion

Realistically for this project in life size scale would not be able to pick up people without harming anyone or even carrying anyone. So the robot will be programmed to grab by the collar and it will be soft robotics to prevent any punctures

Summary Statement

This project is about building a robot that can efficiently and safely recover from a natural disater

Help Received

Ms.Sanchez supervised us and gave us the robotics kit