ECE 387

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03/15/2019

Final project proposal

This project is a camera robot, it will help parents to take care of their kids on the Gym, they will know what are their kids doing and if there are any dangerous things near them by their phone app.

The camera robots would satisfied several features below:

1. It can move by the wheels or track
2. It can track the moving object and follow it.
3. Making a connection between Raspberry pi and phone and send the video to the phone.
4. It will be able to distinguish what is the dangerous object or situation.

**For feature 1:**

I already buy some wheels, tracks, small metal plate and motors from the Amazon, so I will make them then connect to the Raspberry Pi to control it to track the item.

**For feature 2:**

I achieve this function in the mid-term project, so It will not be a big problem, the challenge is I switch the Arduino to the Raspberry Pi for more powerful function, so I will recode it and let it suitable to Rasberry Pi.

**For feature 3:**

Raspberry Pi has a wireless module called “On-board WiFi”, I will figure out how it works and how to connect it with the computer. Then there is a challenge for me, that is how to record the video and send it to the phone by the app, the code part will be huge and difficult.

**For feature 3:**

For feature 3, I will update the library of pixy2, so it will know the shape of the dangerous object. After that, it will send a dangerous alarm to notify the parents.