

# Hairy Product



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**INDD211**

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# Introduction

Since we relies on many digital devices in these days, looking for wifi spots becomes biological instinctive behavior as a human being in modern society.

According to my life experience, about 90% of people usually looks for wifi spots whenever they get places outside of their houses (restaurants, cafes, libraries, street, someone's house... etc), just because of save their monthly datas and high definition Youtube videos.

This project is focusing on making people recognize how much they are addicted and driven crazy by technologies, by pranking them with creepy looks wifi router robot.



# Project Description & Category



Hairy Product is the creepy hairy appearance robot which has built-in wifi router, and instead of leading connected client to internet, it runs away from the client and tries to disconnect him/her from the wifi connection.

In other words, this robot gives middle-finger to those people who always looks for wifi spot and be cheap.

Since its creepy appearance and confusing function, this project can be categorize as Ludic Design.

# Inspirations

This non-make-sense project is inspired by "Useless Machine (Useless Box)". It is invented by Marvin Minsky in 1952. The function is simply the device kills its own switch by itself after switch is turned on.



The reason why I add creepy appearance into my project is, people usually pay more attention or awareness to things unfamiliar and undefinable. And I also like creeps people out.

The appearance is inspired from the character in one of the Japanese horror movie that scared shit out of me when I was small.

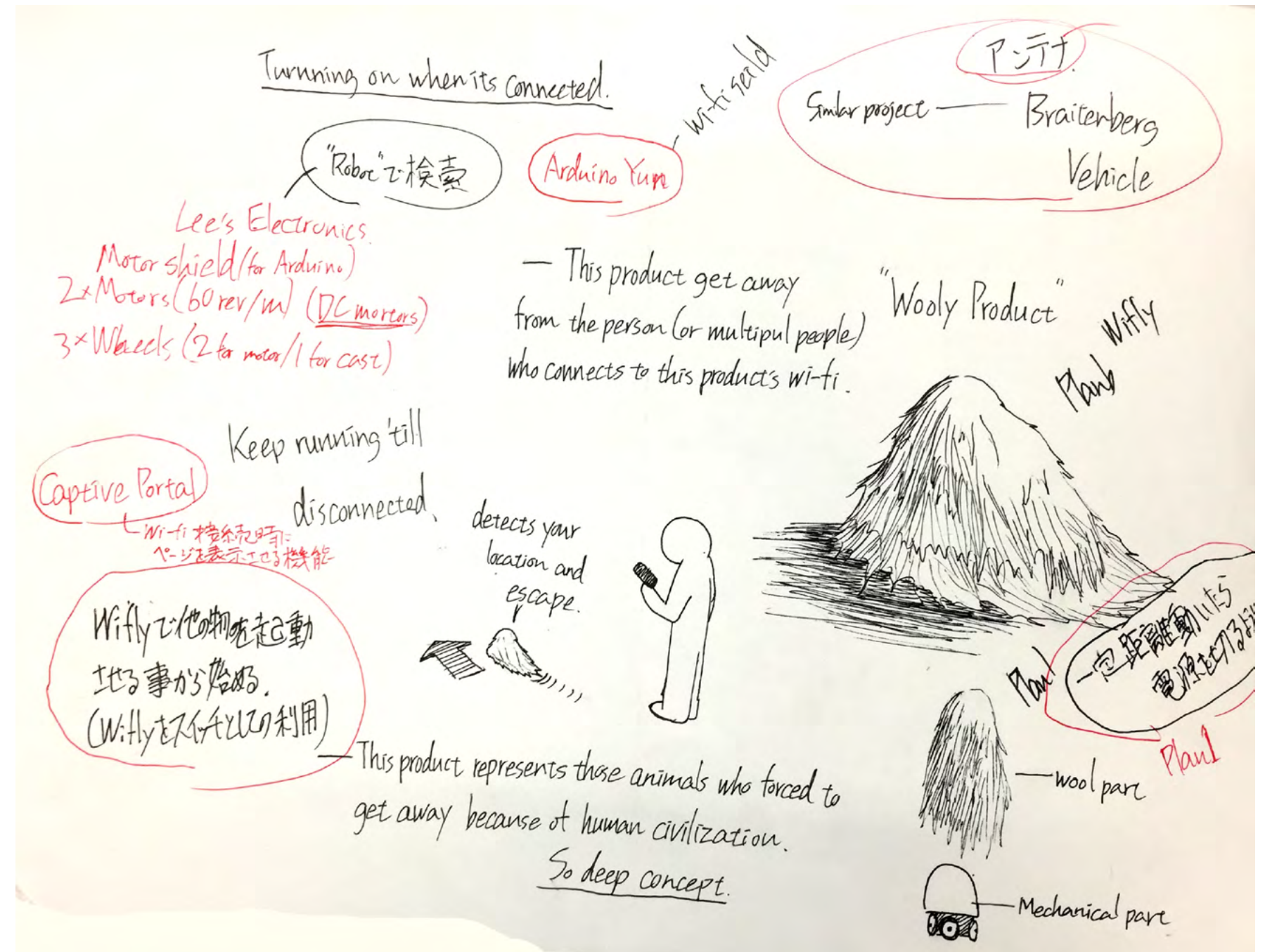


# Sketches

# Final Sketch

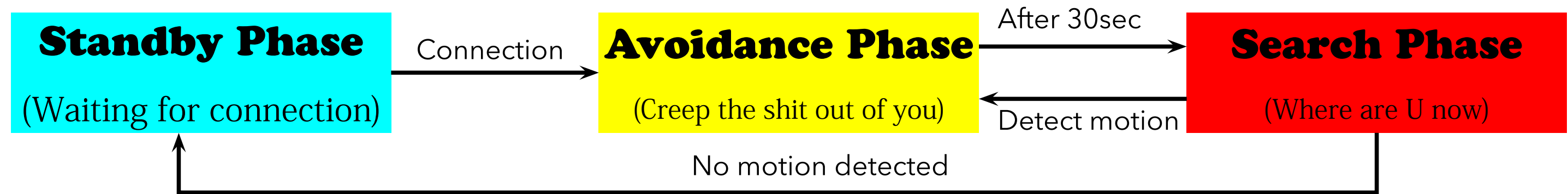


# Penguin Idea



## Very first concept sketch

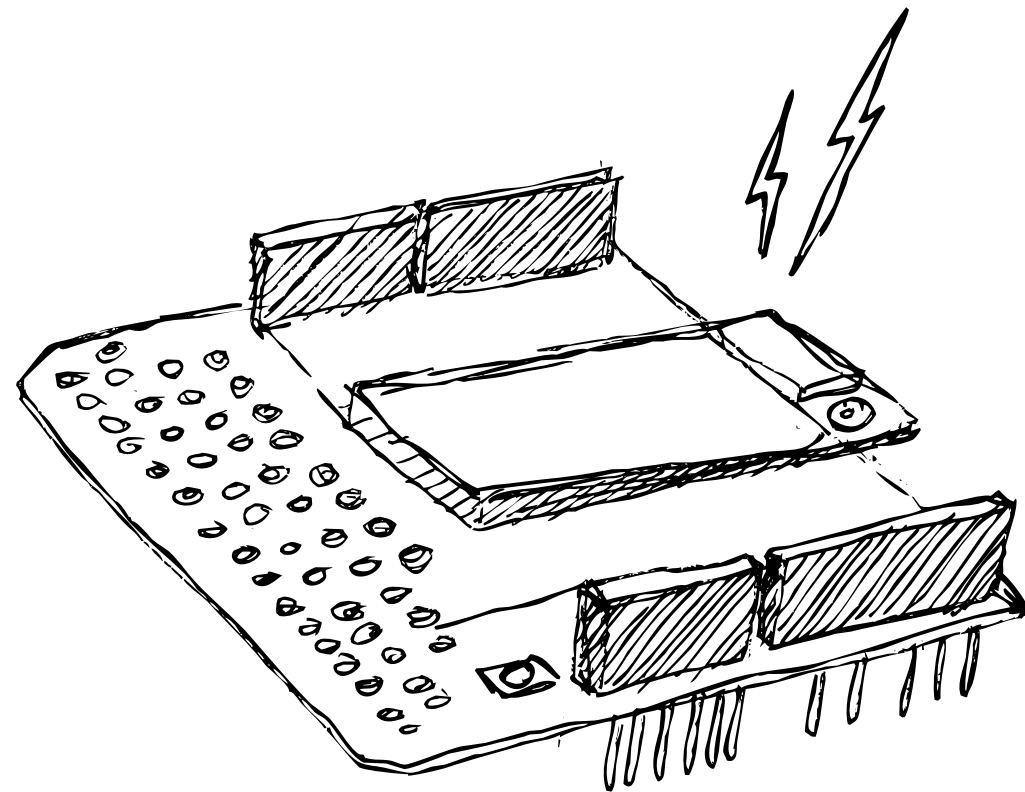
# How is it possible tho...??



## Standby Phase Friends

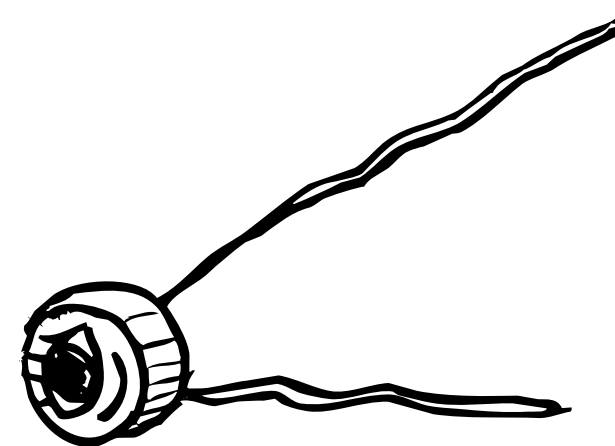
### Wifly Shield

- Creates wifi spot "hairy\_product"
- Turn on LED when its got connection.



### Photosensor

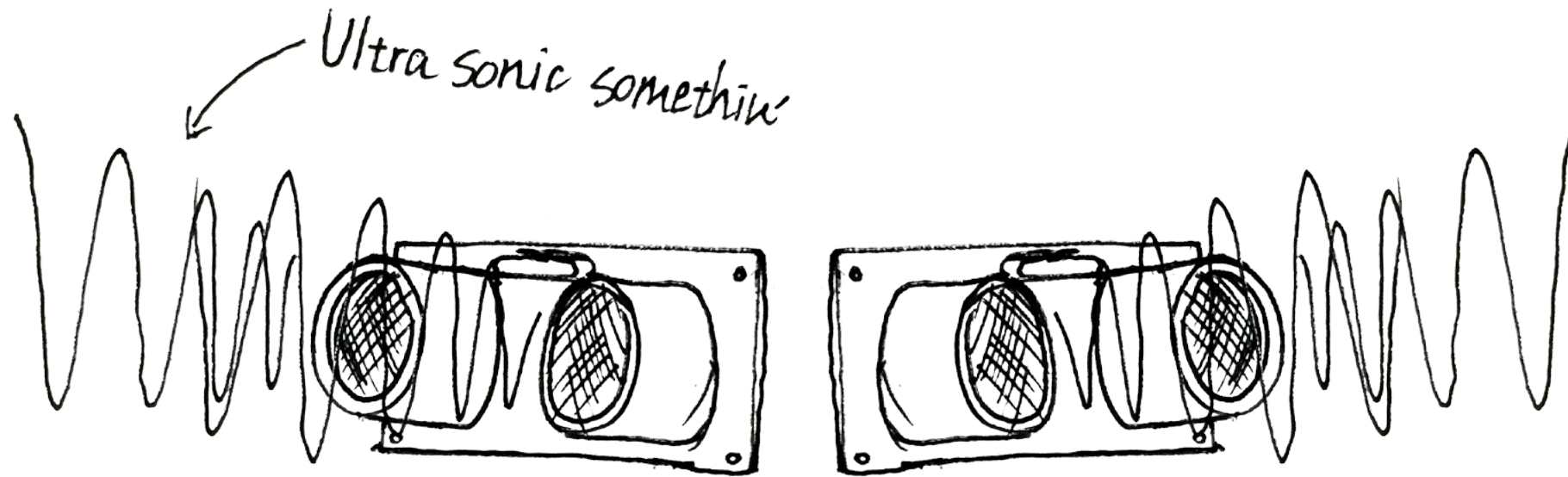
- Looks at Wifly's LED
- Turn on Avoidance Phase when wifi gets connection.



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# Avoidance Phase Friends

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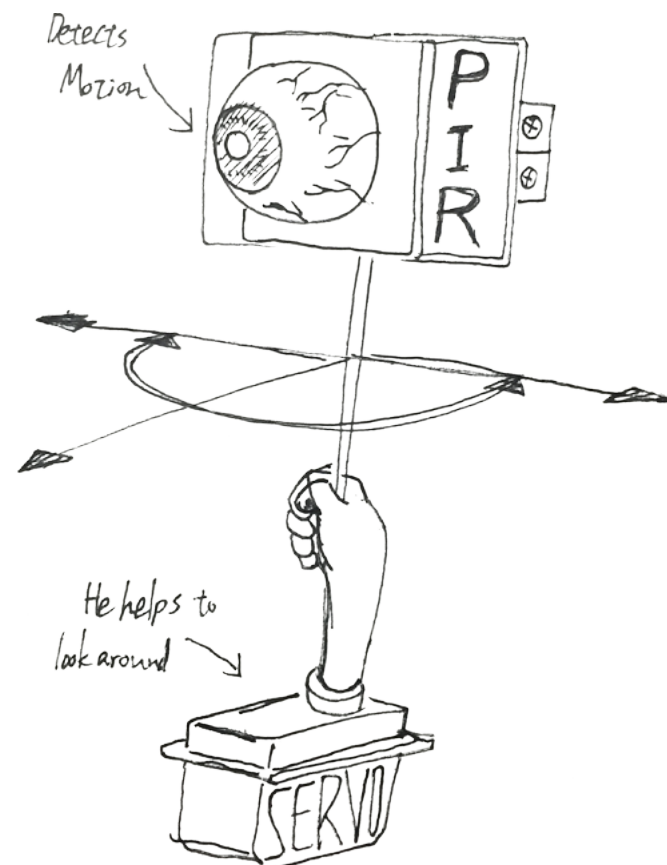
## **USRD Brothers**

- Finds objects on its way
- Sends signal to motors

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# Search Phase Friends

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## **Mrs. PIR Sensor & Mr. Servo Motor**

- PIR Sensor looks for motion for 5secs in 3 directions.
- Servo Motor helps PIR to check surrounding. Rotate 0 to 180 degrees.

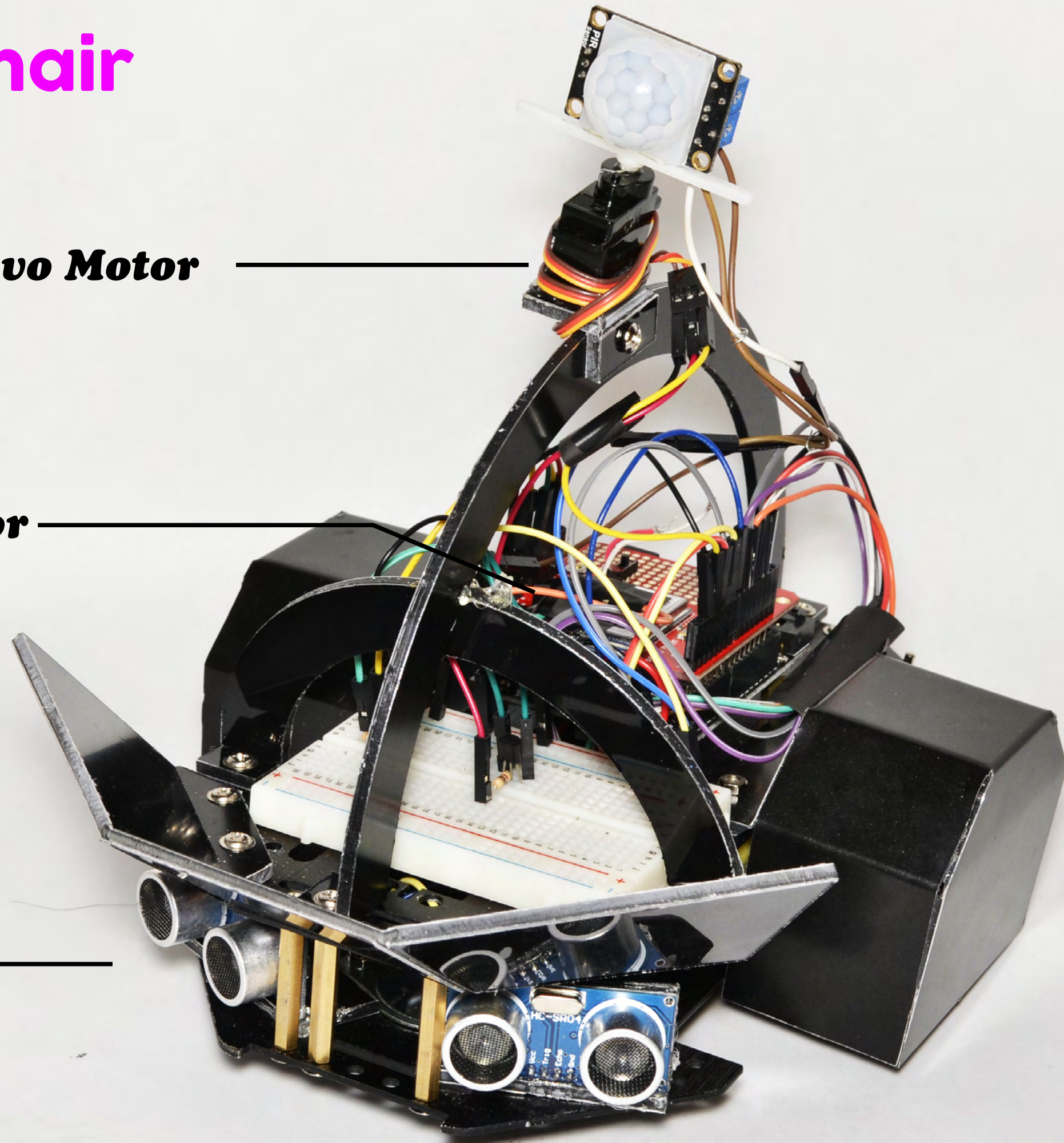


# Inside of hair

***Mrs. PIR Sensor & Mr. Servo Motor*** —————

***Wifly Shield & Photosensor*** —————

***USRD Brothers*** —————



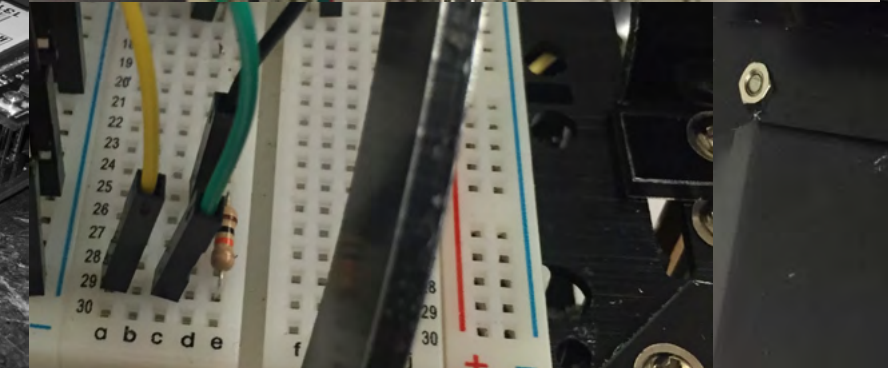
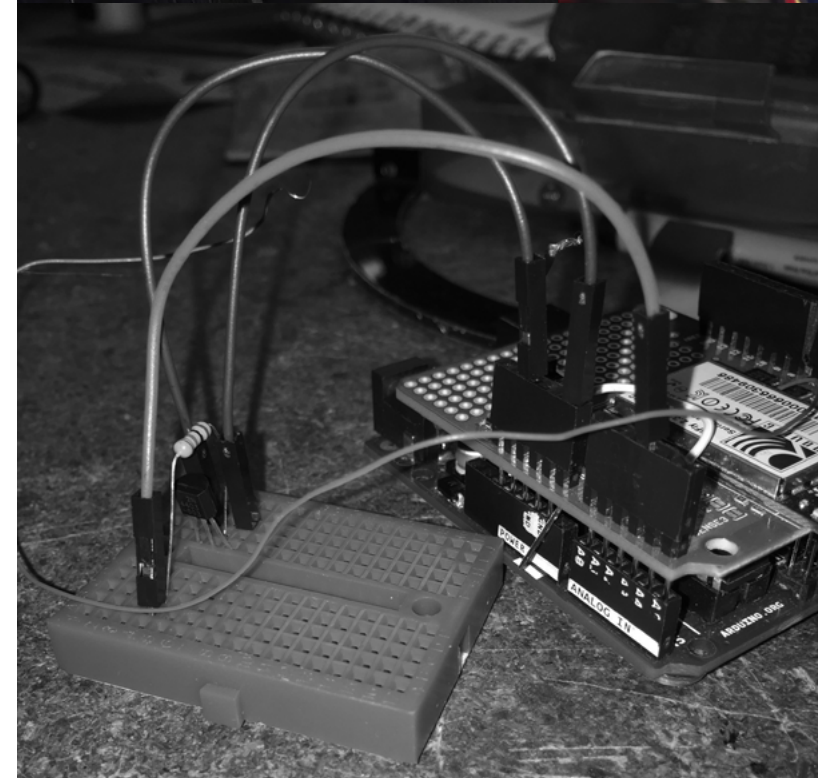
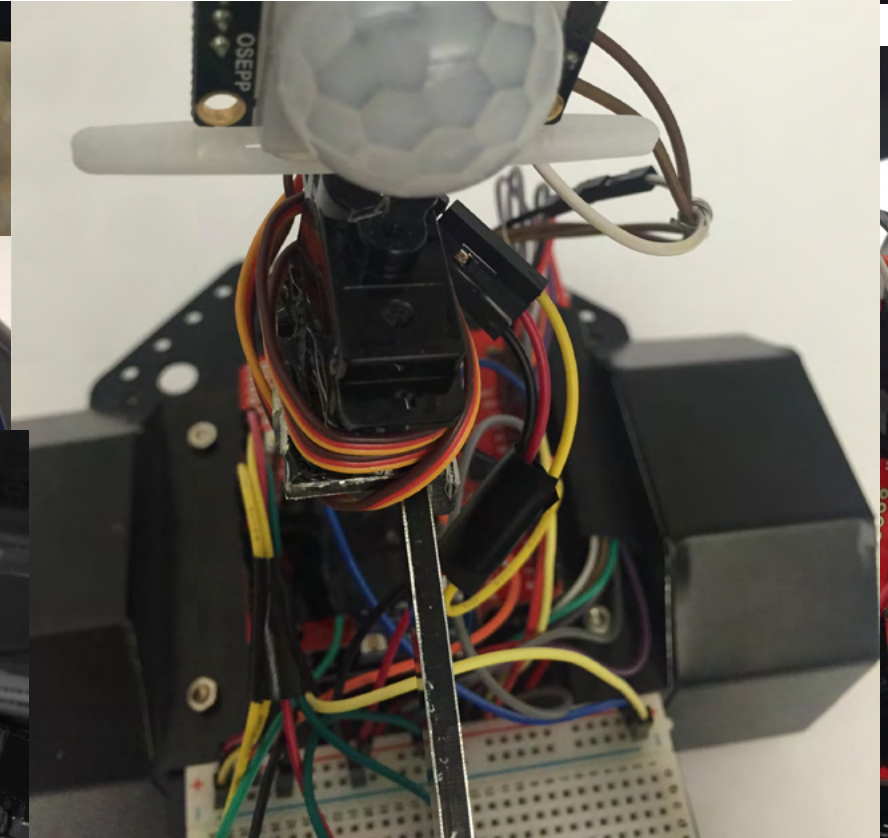
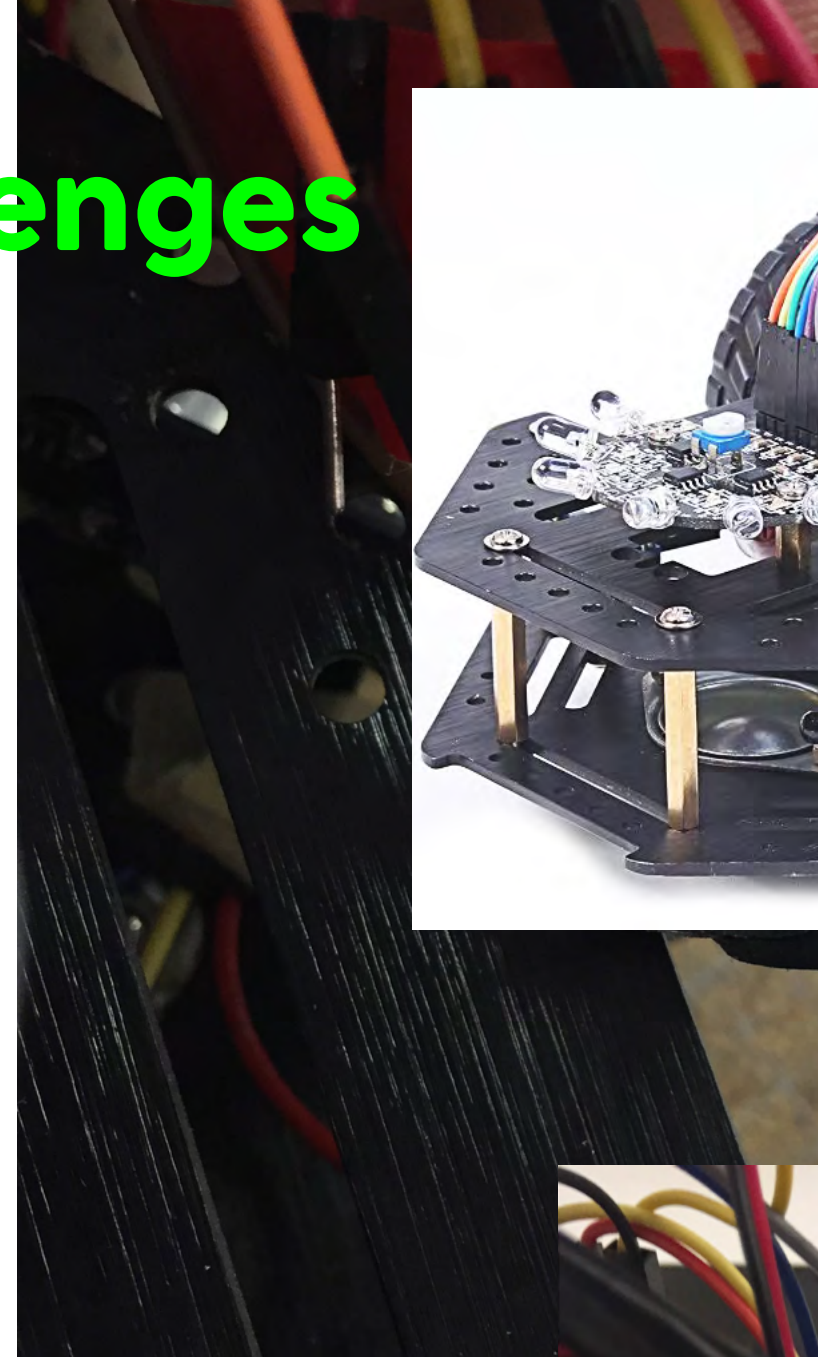
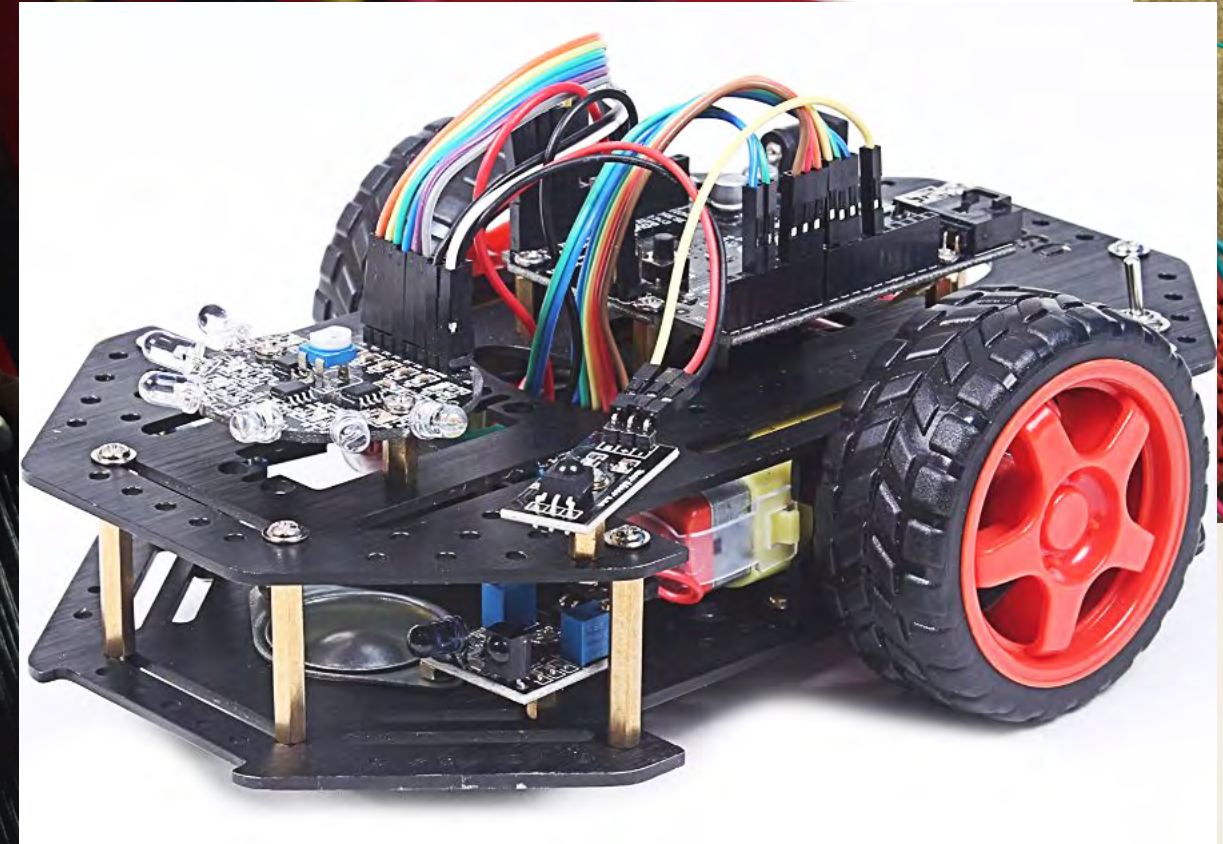


# Development & Challenges

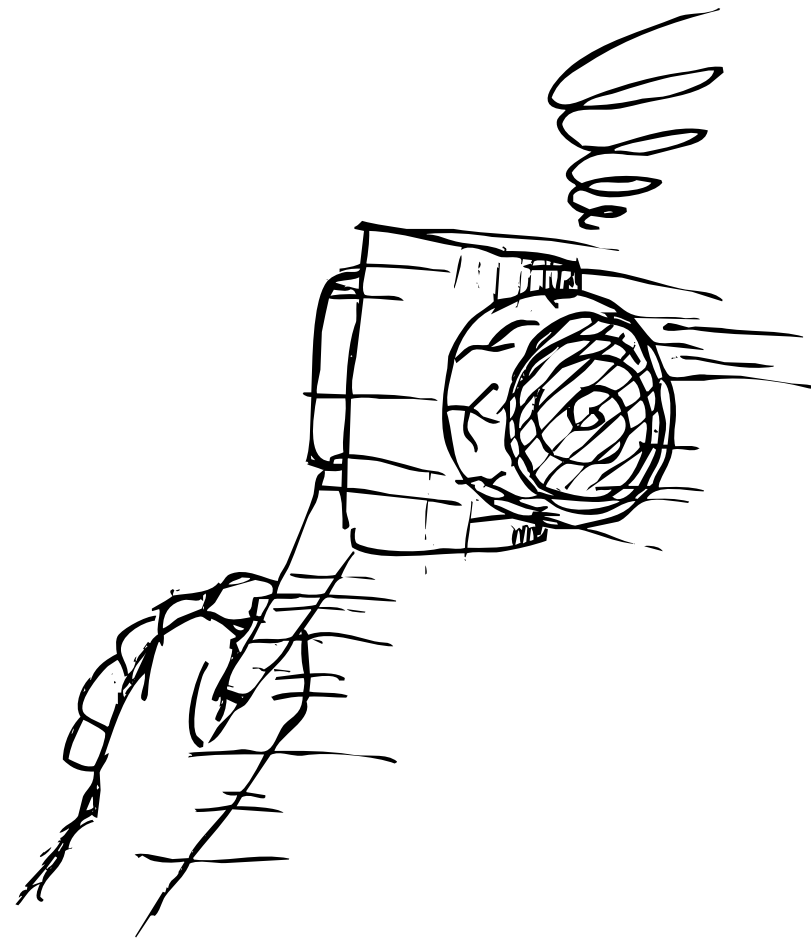
Build base robot & code

Test sensors & codes

Add







## **Conflict between Mrs. PIR & Mr. Servo (2016)**

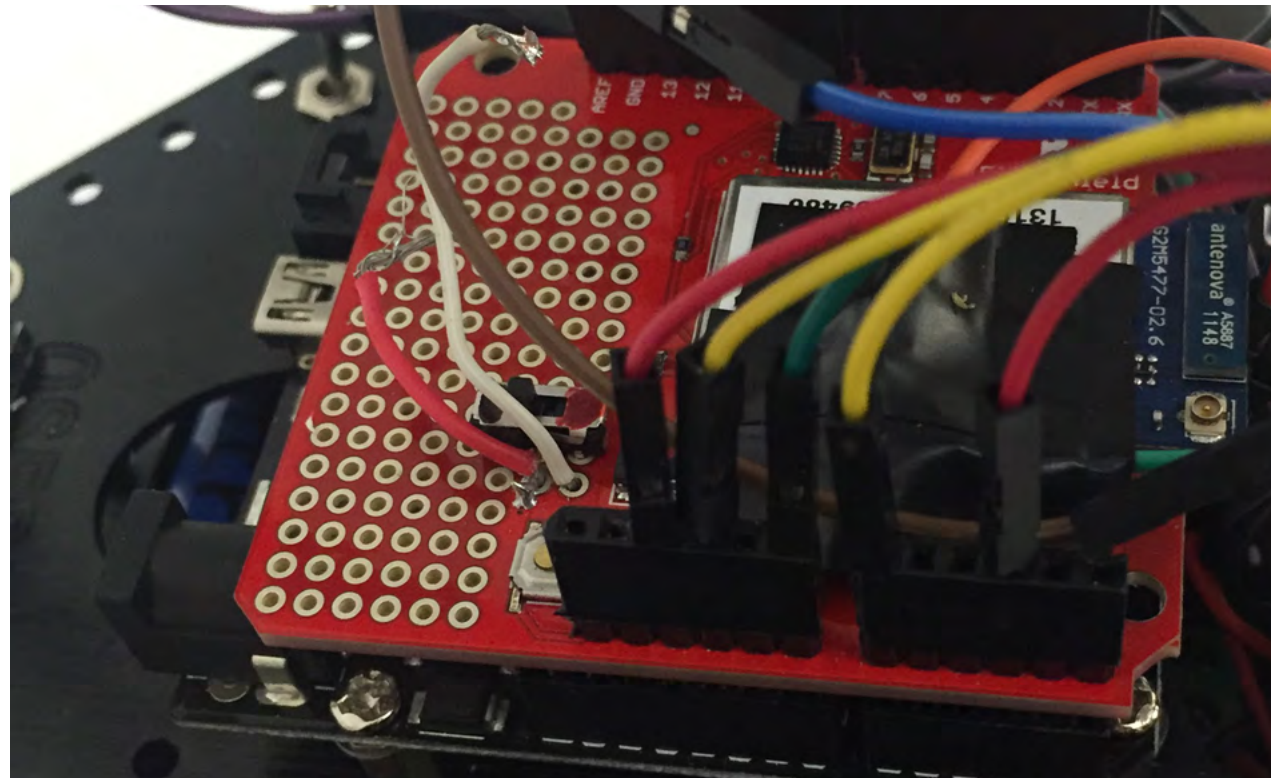
This problem was sending erroneous signal which is mis-captured while the servo motor is spinning to change sensor position. This was because of PIR sensor needs to be stopped while it looks out for motion.

This was solved by adjusting signal correction time with Millis and Switch Case codes.

## **Conflicts between Tetsu & Macbook Pro (2016)**







## Wifly meets photosensor (2016)

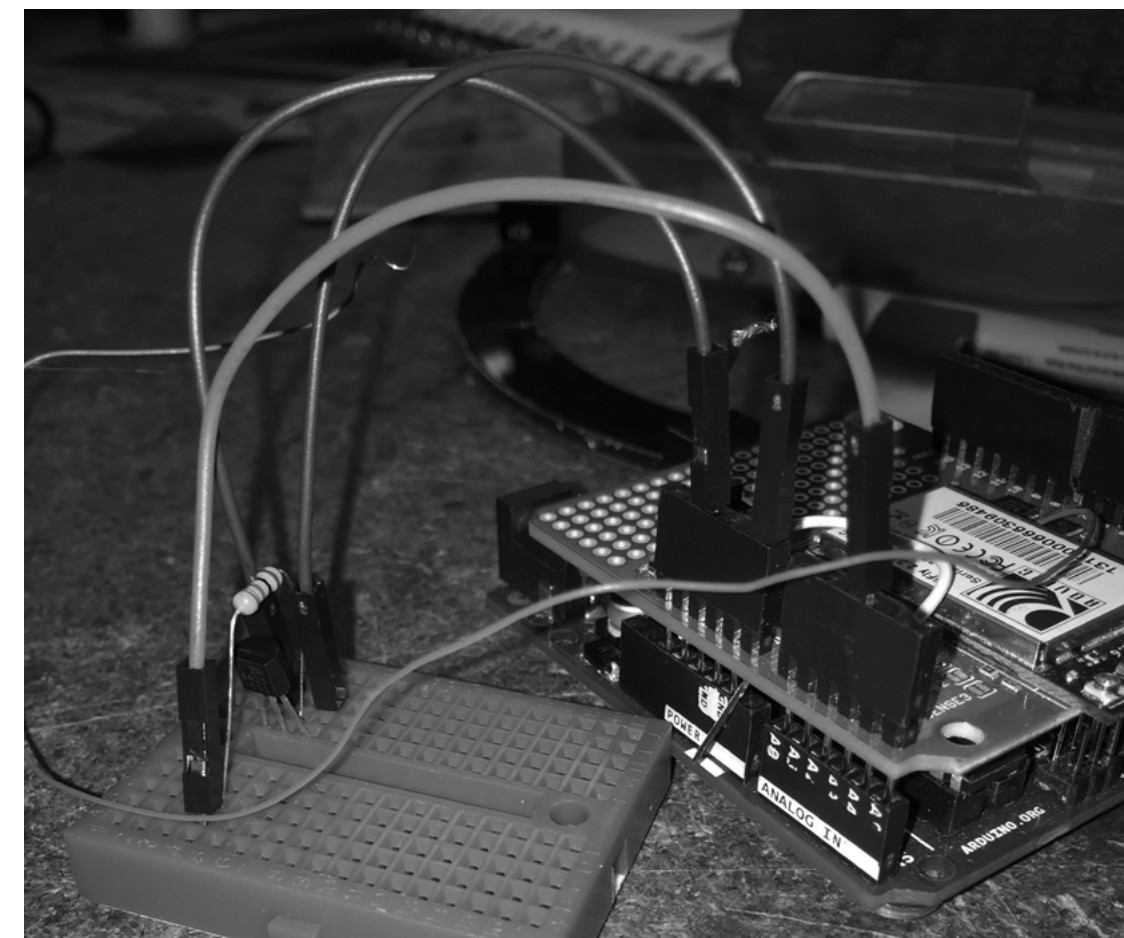
The complication of using Wifly Shield was next level. It was impossible to make this project work by coding it.

What I did (It's Bobbi's idea) as a solution was, take advantage of function of the shield. Since its mounted LED turns on when it gets connection, I mounted photosensor as a switch from the shield to other function.

## Mystery of stupid Wifly Shield (2016)

This problem was caused by mysterious function of the shield. The connection LED suppose to be turned off when its disconnected from devices, however, somehow it never turned off.

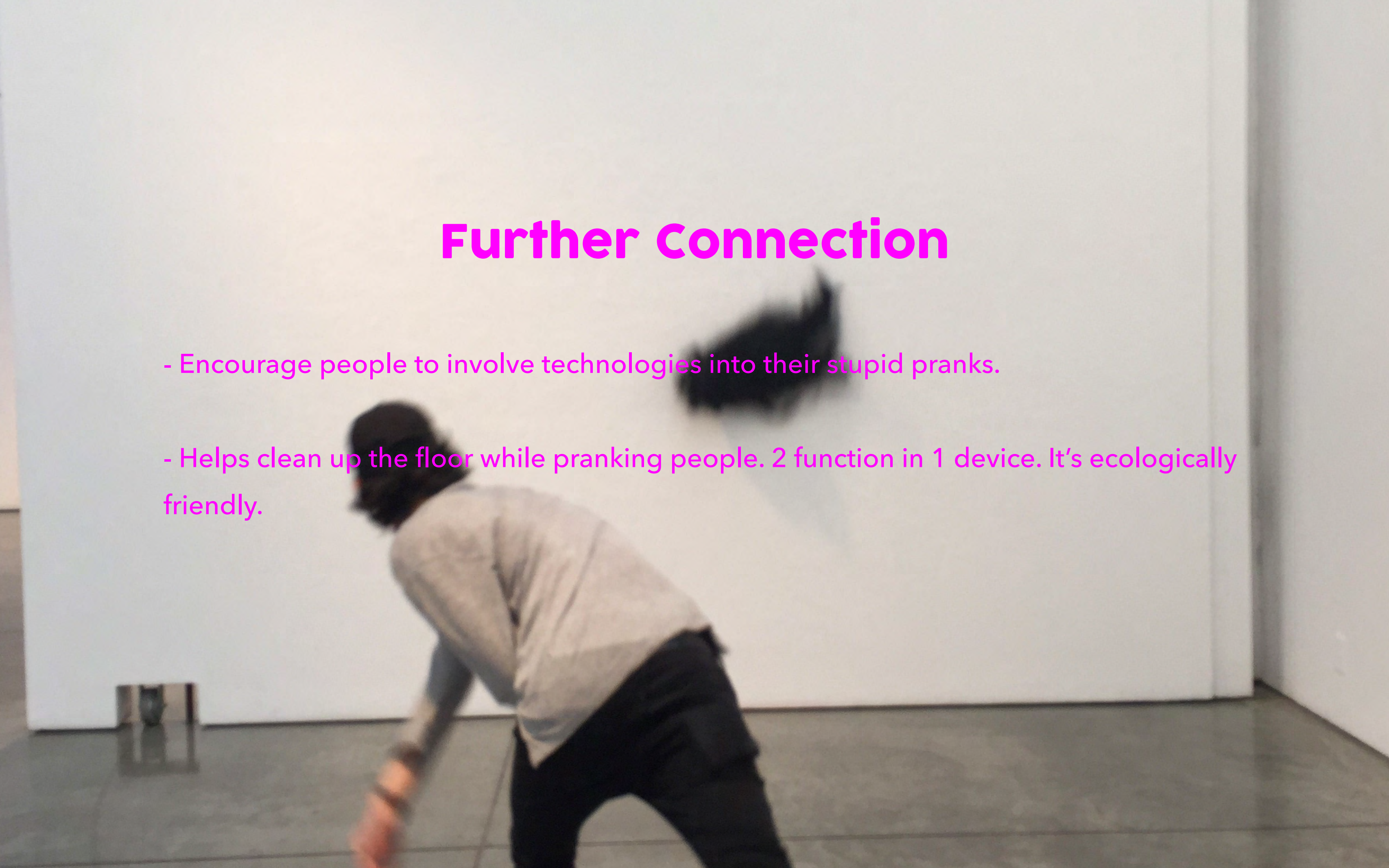
I successfully avoid this problem by resetting the shield itself after all the phases.





# Further Connection

- Encourage people to involve technologies into their stupid pranks.
- Helps clean up the floor while pranking people. 2 function in 1 device. It's ecologically friendly.





# Credits

**Project Director    Tetsu Yokochi**

**Robot Assemble    Tetsu Yokochi**

**Code Builder    Bobbi** (Tetsu Yokochi)

**Wiring Person    Tetsu Yokochi**

## **SpecialThanks to...**

**Garnet and Bobbi for supporting through the semester.**

**My Macbook Pro for being awesome.**

**Apple Store in Pacific Centre for repairing for free.**

**Wendy's Dibond part to be part of my project.**

**Alcce for takin picture, me throwing hair around.**

**Arlo for being my bestfriend and play with me all the time.**

**Everyone in the class.**