Journal Report 13
1/6/20-1/12/20
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Daily Log

Monday January 6

Settled back into Syslab - reviewed environment, Github, etc. to get back to speed where exactly I had left off.

Asked Dr. White for a Raspberry Pi 4 Canakit Starter Kit

Tuesday January 7

Received Canakit Raspberry Pi 4 Starter Kit from Dr. White

Opened up kit and explored different parts, taking time to understand each. Had to look some stuff up.

Began looking into how to set up Pixy camera.

Thursday January 9

Continued looking into setting up Pixy camera - after some confusion about different versions and ways to set up the camera, was able to successfully configure the Pixy camera to observe a live feed of what was going on in front of it.

Later, after looking more into the Pixy camera and its functions, I realized that the Pixy camera (based off of CMUcam5) is actually a camera that is meant for object detection from objects that are very close to the camera, and thus the resolution is not where I need it to be (noticed this in testing as well). I looked into the Raspberry Pi camera module, and it seems to be a much better fit for what I need (it's also a world of a lot easier to program compared to the Pixy camera) and so I'm going to talk to Dr. White about this on Monday.

Timeline

Date	Goal	Met
12/26/19	N/A (Winter Break)	
1/2/20	N/A (Winter Break)	
1/9/20	Set up Pixy camera to be working and able to take pictures	Yes; Successfully set up Pixy camera
1/13/20	Talk to Dr. White about getting Raspberry Pi camera and while waiting look into how to program Raspberry Pi camera module and linking it to my current system	
1/20/20	Hopefully recieve and set up	

Reflection

This week was successful, because I was able to set up the Pixy camera. This went smoother than I thought it would, considering Pixy is a relatively less-known product, and so I thought I would have limited support when trying to work on it. But, all was well and though the process was not completely intuitive, I got it set up. However, I also realized that the Pixy camera (which is based on CMUcam5) is not adequate for my needs, as the resolution is too little and it is mainly meant for object detection (not even identification). Programming it in Python also is extremely cumbersome, from what I've looked into so far, and I've decided that I want to use a Raspberry Pi camera module. I'm going to talk to Dr. White about this on Monday, and hopefully it comes in fairly soon so I can have it set up by the end of the semester.