Daily Log

Monday November 18

Tried a number of different fixes for the PIGPIO_ADDR issue, including switching the IP address found when running hostname -I and using an explicit socket call within the code. When none of the fixes worked, I hypothesized the issue stemmed from restrictions in the school Wifi the Pi was connected to at the end of the period.

Tuesday November 19

Asked for the Syslab wifi password, and in the meantime made sure the gpizero code would work if run locally on the Pi itself. Realized that the Raspberry Pi model 2 I was using couldn't support wireless connection so I looked into getting a Wifi dongle to plug in.

Thursday November 21

Obtained a new Raspberry Pi Model 3B and used the same microSD card on the new Pi. Connected to the Syslab wifi on both my computer, phone, and Pi, in hopes to establish a working connection between all three. Ran the gpizero code remotely again and found that it works!

Timeline

Date	Goal	Met
Today minus 2 weeks	Wirelessly obtain video feed from phone to computer	Yes, I installed ipCamera and can transmit video.
Today minus 1 week	Learn how to control motors through the GPIO pins	Yes, I found gpizero, a possible solution to the problem. This package gets me closer to meeting my winter goal
Today	Wirelessly send signal from computer to the Raspberry Pi	Yes, the remote connection between my laptop and the Pi was successfully established
Today plus 1 week	Research ways to change the signal sent to the GPIO pins	
Today plus 2 weeks	Begin working on creating an interface that allows users to control the motors on the computer	
Winter Goal	Send signal from Camera to Computer to Raspberry Pi GPIO Pins	

Reflection

The successful setup of the GPIO remote pin control is very helpful in meeting my winter goal. I plan to integrate the gpiozero code into the existing python file for ball tracking I have, and find a way to change the signal being sent to each motor based on what the ball tracking code returns. I feel more comfortable working with the Pi now than I did a month or two ago.