

## Journal Report 9

11/10/19 - 11/17/19

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### Daily Log

#### Monday November 11

Began research on establishing a connection between the GPIO pins on the Raspberry Pi and the Computer. Found a program called gpizero and began reading about how to implement the package with Python code.

#### Tuesday November 12

Installed gpizero onto my own computer and the Raspberry Pi. Created a program to establish a connection between the pi and the computer (see code below), but the code hung on an issue with the socket being unable to be found.

#### Thursday November 14

Looked into reasons why the Ip Address would not have been connected. Read about the pigpio library and looked through (<https://buildmedia.readthedocs.org/media/pdf/gpiozero/stable/gpiozero.pdf>). Was absent on Thursday so I could not test potential solutions to the connection issue, but compiled list of changes to implement to connect the raspberry pi to my computer to try next week.

## Timeline

Date	Goal	Met
Today minus 2 weeks	Install OpenCV and write basic program using camera	Yes, I completed the install of OpenCV, but didn't get the chance to write a program
Today minus 1 week	Wirelessly obtain video feed from phone to computer	Yes, I installed ipCamera and can transmit video.
Today	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 plus 1 week	Wirelessly send signal from computer to the Raspberry Pi	
Today plus 2 weeks	Research and set up camera	
Winter Goal	Send signal from Camera to Computer to Raspberry Pi GPIO Pins	

## Reflection

Code for the implementation of gpizero and the control of one LED connected to a GPIO pin on the Raspberry Pi: \$ PIGPIO\_ADDR=192.168.1.3 python3 led.py

```
from gpiozero import LED
from time import sleep
red = LED(17)
while True:
    red.on()
```

Code did not execute, gave error of inability to connect the socket at the ip address given (used ip address of rpi after running hostname -I)