

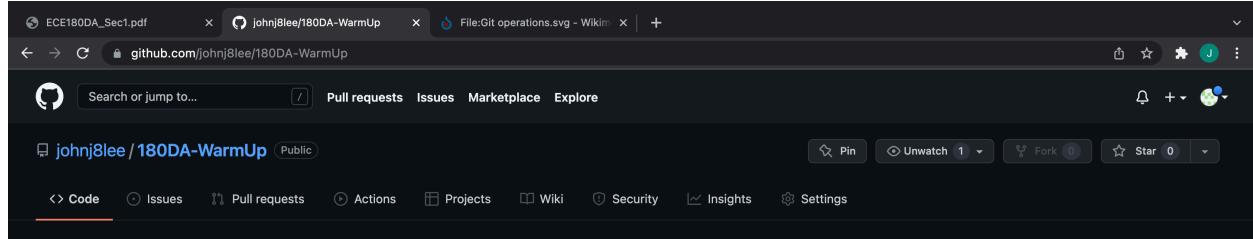
John Lee (305140447)

EC ENGR 180D

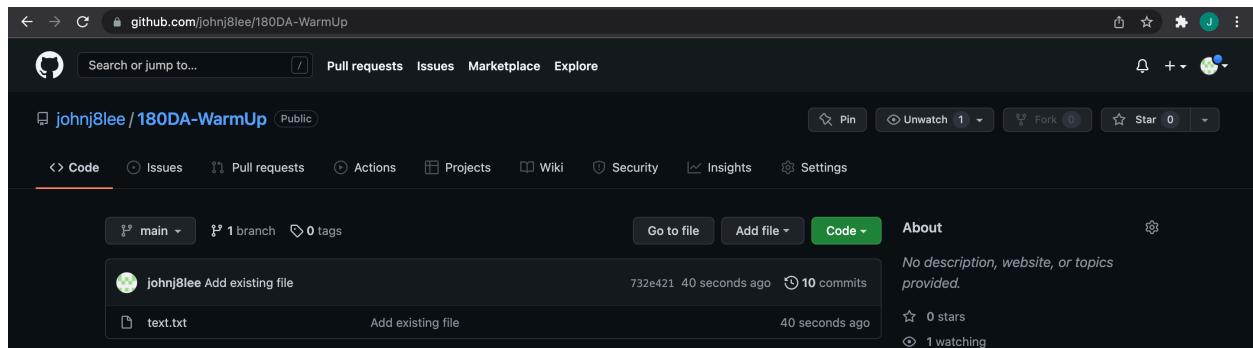
Professor G. Pottie

Lab 1

Task 1:

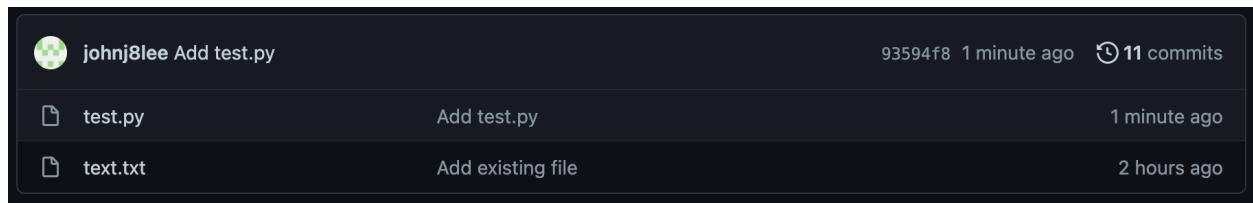


Task 2:

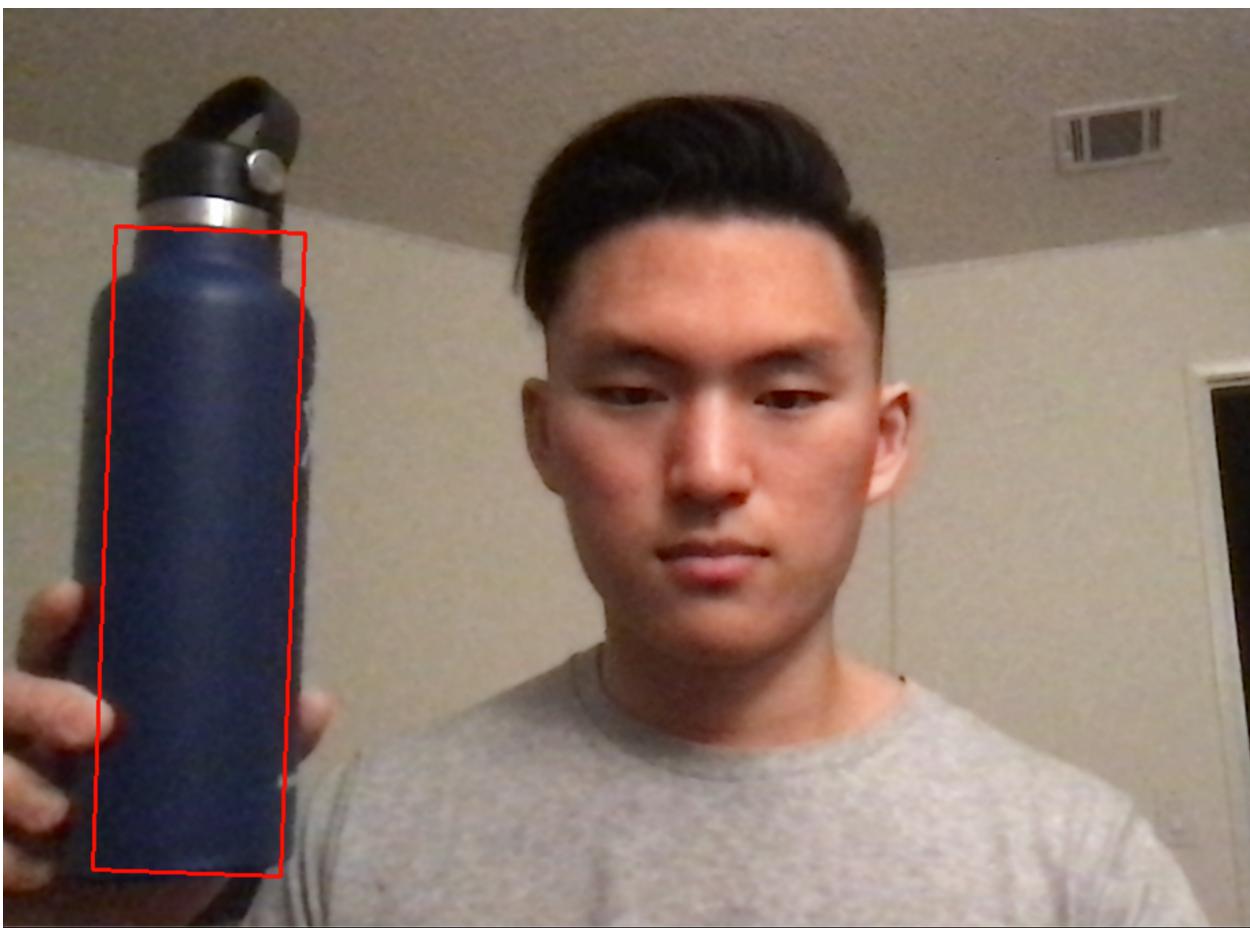


Task 3:

```
[(base) jefe@Johns-Air 180DA-WarmUp % conda activate environment1
[(environment1) jefe@Johns-Air 180DA-WarmUp % python3 test.py
You are living in 2017
(environment1) jefe@Johns-Air 180DA-WarmUp % ]
```



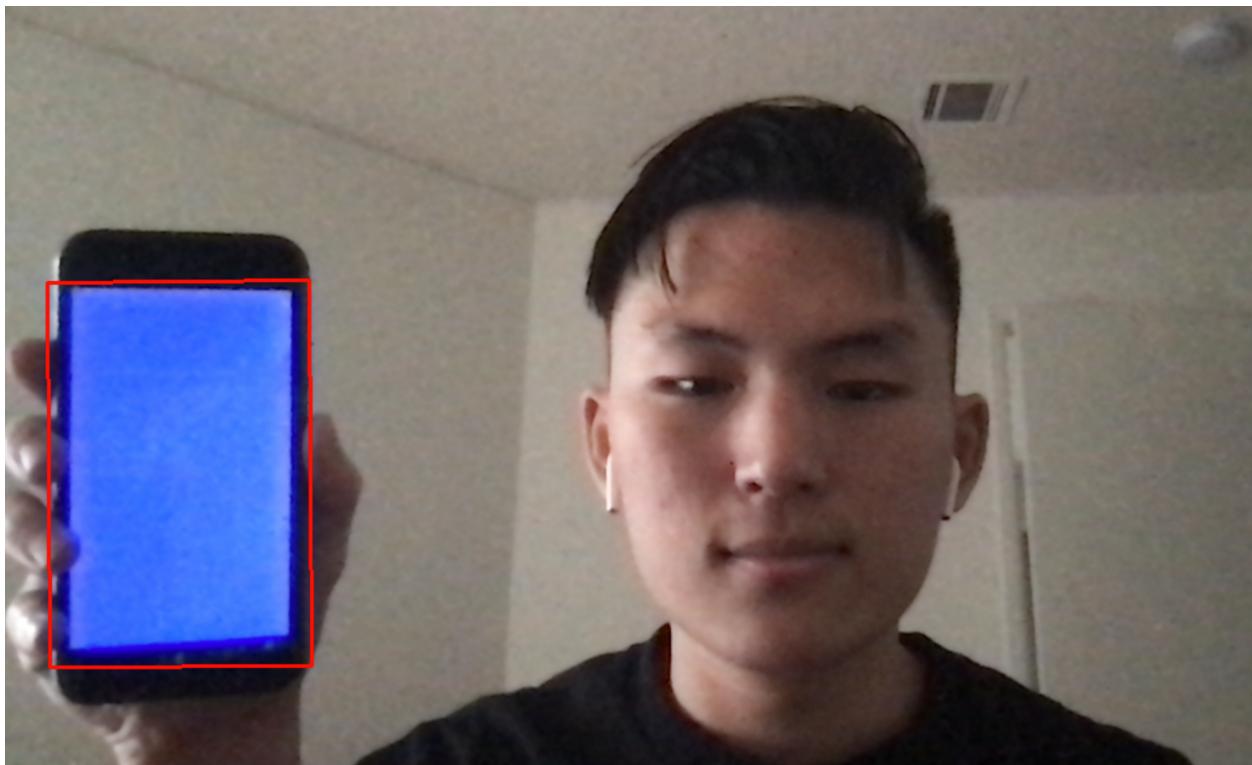
Task 4:



HSV worked better at detecting colored object

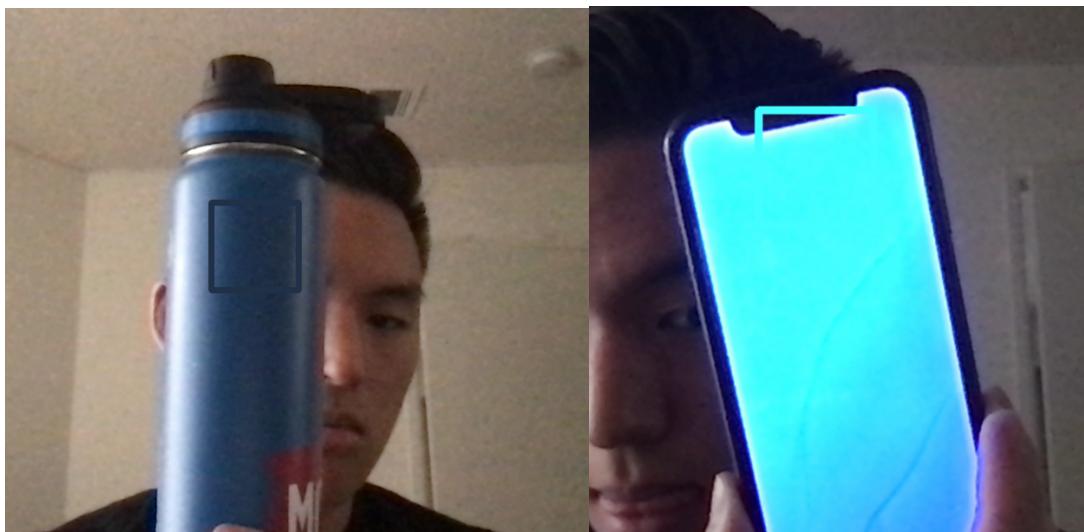
2. Changing lighting conditions such as turning on or off the lights negatively affects the performance of detecting the colored object. This may be due to the lighting affecting the color's brightness which makes it fall out of range.

3.



Lowering Brightness affected the color tracking ability. Raising brightness didn't seem to affect tracking ability.

4.



Changing surrounding brightness directly affects the brightness of the color detected. In a dark environment, the color detected is darker; while in a lighter environment, the color detected is lighter. Same goes with changing the phone brightness.