Journal Report 1 9/1/19-9/7/19 Sophia Wang Computer Systems Research Lab Period 1, White

# **Daily Log**

#### **Tuesday September 2**

I began installing Open CV on my laptop. I ran into some issues within installation. I got a "FATAL: In source builds are not allowed. You should create a separate directory for build files" error. Eventually, I gave up and began researching Gesture Description Languages (GDLS). I also read some tutorials on motion tracking.

#### **Thursday September 4**

I talked to you about the error after attempting install by myself a few more times. Chromebooks don't have the best software so maybe I will bring in a different laptop from now on. My partner wants to used Google colab so I went to go create a program in Google colab. I realized that Google colab only supports Python so I researched if Python OpenCV is noticeably slower than C++ OpenCV. Python OpenCV paired with numpy is comparable to C++ OpenCV. The slowdown is when you have user-defined python functions. I will probably be using Python OpenCV for easier compatibility with my partner.

### Saturday September 7

I practiced using OpenCV and numpy. I practiced image manipulation: blurring, converting from BGR to RGB, etc. Still need some practice. I also learned some of Numpy's methods and data structures.

## **Timeline**

Date	Goal	Met
8/26	No goal because it was first day of	
	school	
9/2	No goal	
9/9	Download and use OpenCV	Yes and No. OpenCV is not intalled
		on my personal machine but I will be
		using Google Colab.
9/16	Film hand waving video and begin	
	video analysis	
9/23	Track Hand Movement	

## Reflection

This week I took the preliminary steps to developing my program. I was hoping to have OpenCV installed on Tuesday so I could have started working on Thursday. However, I may not need OpenCV on my laptop at all with the use of OpenCV's Python wrapper. I also began to learn how to use OpenCV and Numpy, tools that will be essential to this project. I hope to be able to track movement in the next two weeks but I do not know if I will be able to due to my lack of knowledge of OpenCV.