Journal Report 9 11/11/19-11/14/19 Aneesh Boreda Computer Systems Research Lab Period 4, White

# **Daily Log**

### **Monday November 11**

I installed Eclipse with the CDT Plugin, as that was a fix recommended by the OpenCV website. I started following the instructions for setting up the g++ linker and listing the included libraries.

### **Tuesday November 12**

I finished setting up the Eclipse IDE, and ran a test program successfully. I then finished the chessboard detection with the OpenCV, and the program can show the chessboard corners being successfully detected.

#### **Thursday November 14**

I wasn't at school.

## **Timeline**

Date	Goal	Met
Week of 11/7	Continued from previous week	I made good progress on the cali-
		bration step, as I found a sample on
		github that I can adapt.
Week of 11/14	Figure out necessary information to	Yes, I found what exactly I need to
	store for camera calibration, work	save, and made good progress on fix-
	on generating calibration from chess-	ing opency
	board training images	
Week of 11/21	Fix OpenCV library linking and get	Yes, the OpenCV libraries are prop-
	chessboard detection working	erly linked and chessboard detection
		works
Week of 11/28	Calculate transformation matrices	
	from chessboard corner detection for	
	rectification	
Week of 12/5	Use blockmatcher and calibration to	
	calculate disparities between pictures	

## Reflection

I made very good progress this week and managed to finish all of my goals. I am on pace to finish my winter goal. Working on actually programming the stereovision algorithm has helped me better understand it. I was able to fix all the issues with getting the OpenCV code to compile correctly. Eclipse makes it much more straightforward to set up library inclusion and linking.

## Winter Goal

My goal is to have working point cloud generation, and to be able to store these distances at different pixel locations.