

Daily Log

Monday November 18

I was planning to set up on the machine for video processing but was unable to. I looked more into openpose and how to get position data from the video.

Tuesday November 19

I looked into the classification side of the project so we can format the position data similarly. I think that we will store the outputs of these programs into text files and run the classification on the files.

Thursday November 21

I researched more into K-nearest neighbors (knn) classification algorithm. I also began to install the packages needed for openpose on the machine.

Timeline

Date	Goal	Met
11/11	Work with partner to put data into neural network, tweak position data if necessary	No, but we will be able to get position data from the 3D modeling
11/18	Calibrated cameras and have calibration model ready for testing	No, changed approach to this. Now attempting to extract from video
11/25	Set up the big machine with all the necessary packages and run it own video	Yes and no, set up big machine with necessary packages but ran out of time to run on my own video
12/2	Find and extract Position data from the videos	
12/9	Begin testing some position data on the classification algorithm and film more videos	
Winter Goal	Have data for classification algorithm and be able to classify a move	

Reflection

With the video processing of the new machine, getting position data should be fairly easy to obtain. I will need to figure out the exact specifications but I do not think it will be too difficult to implement. I hope to run on a video tomorrow but I may also be formatting my github during class.

I hope to begin training our Support Vector Machine (SVM) and KNN algorithms within the first two weeks of December. I want to see if we can classify simple moves by simply using one camera. If not, we will need to build a 3D model using multiple cameras. The SVM and KNN, however, would simply just need to be retrained with the newer position data sets. Therefore, when we have the classification side working, it will just be a matter of retraining the neural network.