Journal Report 15 1/13/20 - 1/21/20 Sophia Wang Computer Systems Research Lab Period 1, White

Daily Log

Monday January 13

I worked on the code that would read in the angles files so we can use it for the kmeans computation. We need to read in the angles file with the angles from each frame and store it.

Tuesday January 14

I helped with the kmeans code. We've been formatting the angle inputs to the kmeans code.

Thursday January 10

We ran the kmeans code and tried to find the best fit for the block + punch move.

Timeline

Date	Goal	Met
1/6	Start on Dynamic Time Warping code	No
	and work on classifying a move	
1/13	Gather test data to train the kmeans	Yes, we have both online and videos
		filmed to train
1/20	Finish and train kmeans	Kinda, we have started to train for
		one of the moves
1/27	Work on training another 1 or 2	
	moves	
2/3	Finish training for the other moves	

Reflection

We're still in the process of collecting data because it's always good to be collecting more video data to further train our program. I'm not sure at the moment if we'll have to kmeans different moves with a different number of clusters but that would be intuitive. That raises the question of how to determine the moves if they need a different number of clusters because it would be inefficient to run kmeans with a different number of clusters to check which moves they are.

I'm not sure how we will deal with that but after we define the clusters for multiple moves, we will see how to best optimize it. Another issue that I think that we will encounter is extracting a move from a video/sequence of moves. I don't know how we will incorporate kmeans into a video sequence of more than one move yet. But we are working toward finding the kmeans for one move and seeing how it will play out.