Journal Report 10 11/25/19-12/5/19 Avyuk Dixit Computer Systems Research Lab Period 4, White

Daily Log

Monday November 25

I did the GitHub assignment today, organizing all of my previous journals and code and creating the README file.

Tuesday November 26

I was absent today.

Monday December 2

I worked with Saketh on our presentation. Specifically, we focused on refining our script and seeing how well it matched with our slides. The last few weeks we had fixed up slides to make things clearer for the audience, whereas today we focused on the script.

Tuesday December 3

Today I discussed the fused network approach with Saketh in detail. We decided that it would be best to work on the idea after Winter break, as though it's something we really want to try, it would be better to do it after we have both our models running well. We also thought about how accuracy sometimes isn't the best metric for our model and how class bias (somewhat prevalent in both our datasets) may affect our results. Finished writing code for machine learning model – will connect it with dataset and write pre-processing code next.

Thursday December 5

Started writing code to execute the model by pre-processing input data and preparing it for use. Have a small dataset (about 100 videos) to use for initial testing to make sure the model works and all. Generating the entire dataset will take a lot of time and I'm working on getting the model ready and working first to be able to meet my Winter goal.

Timeline

Date	Goal	Met
Today minus 2	Review OpenPose code and deter-	Completed
weeks	mine best statistical representation	
	for poses.	
Today minus 1	Decide on architecture to use	Finished
week		
Today	Create model, get it ready for use	
Today plus 1	Run model on dataset - obtain initial	
week	set of results	
Today plus 2	Refine model to meet winter goal	
weeks		
WINTER	Achieve 70% accuracy	
GOAL		

Reflection

I know I'll have the model ready to go and working before Winter break, but I'm still a little concerned about dataset generation. Sure, I could use a small number of samples to obtain an accuracy but would it really be representative of my model's performance? Hopefully that's something I can try and fix before Winter break. Otherwise, things seem to be going well and everything is on track. Still need to decide how to determine what number of timesteps to use in the model and remove bystanders or other potential confounding variables.