Daily Log

Monday December 9

I was absent today.

Tuesday December 10

Finished writing code that takes a dataset of violent and non-violent images and annotates poses onto them. This took a decent amount of debugging because a lot of the config parameters from the original OpenPose model had to be reworked for my laptop. Additionally, there were a lot of small parts of the code that were outdated because I had a new version of python. I also had to convert the model from Caffe to Keras so it could be run without a GPU on my laptop.

Thursday December 12

Ran and refined code from Tuesday. It was really slow so I made a few modifications and simplifications that allowed it to run faster (i.e. skipping certain frames, only keeping important features, etc.). Each iteration still took a pretty long time to run so even getting through a few thousand frames will be challenging. Hopefully it'll still be enough to run my model with and meet my Winter goal. I thought about possible ways to deal with large amounts of memory and speed up the processing, but couldn't come up with anything great. This is definitely an area I will focus on after meeting my Winter goal.

Timeline

Date	Goal	Met
Today minus 2 weeks	Decide on architecture to use	Completed
Today minus 1 week	Create model, get it ready for use	Finished
Today	Dataset generation.	
Today plus 1 week	Run model on newly generated dataset - obtain initial set of results	
Today plus 2 weeks	Large scale dataset generation and being time-efficient	
WINTER GOAL	Achieve 70% accuracy	

Reflection

Memory and speed are becoming challenging issues to deal with now. The dataset I will have to use to meet my winter goal is going to have to be fairly small. It would be disappointing if I couldn't find some way to process the vast amount of data I've collected (millions upon millions of frames) in some efficient manner. Definitely will talk to Dr. White about this after I meet my Winter goal. Will be a good future goal to set towards the end of Q2. Also am still thinking about how this will all interact with Saketh's model. If it takes too long to run, it'll be ineffective as a tool for authorities to use.