

Daily Log

Monday October 7

Got GUI to display properly on Linux system. Enabled classification function through GUI, though only in a simple format (plan to make more robust in the future). Began preparing Windows version of Darknet for usage after Linux version is fully working, had some issues with setting up the dependencies for the program.

Wednesday October 9

Modified sorting program to more appropriately connect with current Darknet GUI command. Added additional catch statements for common errors I ran into while using the GUI (usually files not being found, and issues with using the PIL library).

Friday October 11

Modified sort program to keep from separating pictures and images from being in the same file location, modified training set sorting method to only select files for training that had an associated classification text file with the same initial filename. Fixed issues with setting up dependencies for the Windows version of Darknet and got it to run basic methods.

Timeline

Date	Goal	Met
September 30	Be able to run Darknet and Darknet commands through GUI, begin work on trying to reach desired accuracy of 95%	Partially met, can run Darknet on custom images and began training (albeit on a small scale), plan to get it connected to GUI next week
October 7	Be able to run Darknet through GUI, Have GUI separation of day and night sets, adapt GUI to be more simplistic and cover more error cases	Was able to meet my goal of running Darknet commands to train through GUI, and did add more coverage for error cases.
October 14	Research packaging whole system of GUI and Darknet together for easy use, compile all image sets together to begin training for full neural net	
October 21	Work on improving accuracy of weighted neural net, add more security for failure cases in the GUI program	

Reflection

This week was mainly about refining my current set of Python programs to function properly in a Linux environment, which came with the added task of fixing some of the common errors I would run into while using GUI. This removed the need to repeatedly change the working directory of the program while it was running, which will hopefully make it more robust for future use. Updating the training file sorting script allowed for creating the necessary training config files with my current setup of image/text files without running into issues with images where no animal was found, removing potential issues from next weeks training goal. I may plan to add a method to the sort program that concatenates multiple sets of images into one directory, just to make training easier in the future.