

Daily Log

Wednesday January 22

I figured out the right commands to run for getting various algorithms (DQN, and Discrete SAC) to run on cart pole. The GPU error that I talked about last time was due to not enabling a flag. Since it works on any Open AI gym environment, it should in theory work with the triathlon. The repository has an implementation of DIAYN, but doesn't have any 'main' method for actually running it on an environment, so I started working on that. The biggest thing is figuring out what hyper-parameters are needed and modifying the config object accordingly.

Friday January 24

After many cycles of trying to run DIAYN, reading the error message, and changing the config, I ran into another GPU error: "Expected object of device type cuda but got device type cpu" Strangely this is the same error I got from last week, but I thought I fixed that issue. I guess something wasn't put onto the GPU because torch.cuda.isAvailable() is also True.

Timeline

Date	Goal	Met
Today minus 2 weeks	Make the project more realistic to complete	Yes, I reduced the number of things that I have to do.
Today minus 1 week	Get DIAYN	No, I created the triathlon environment instead. Also found something that will help me with this goal next week
Today	Get DIAYN Running	Not yet
Today plus 1 week	Get DIAYN Running	
Today plus 2 weeks	Benchmark DIAYN, discrete SAC, and DDQN on triathlon	

Reflection

There is only one hurdle left

1) Get DIAYN to work: still in progress

I made some pretty good progress this week, but I still wasn't able to get DIAYN to work. I had to do more than I expected. I'm still a little sad that I am spending most of my time on things besides working on my algorithm, but I guess its a lesson learned. Over the past few months, I've reduced the amount of things I need to do. I think even if I get DIAYN to work, I will be satisfied because I did something that wasn't just using other people's code. I can still talk a lot about this topic in the presentation, so it wouldn't be too bad.