Source Code:

GitHub: https://github.com/steve3p0/cs510dl/tree/master/hw5

For this assignment you will implement DCGAN in pytorch. The code is available at this link: https://pytorch.org/tutorials/beginner/dcgan faces tutorial.html

1. How long did it take you. Any significant challenges?

It took one hour and twenty-three minutes to train on all 200,000 images on a computer with a GTX 1070 GPU.

It was difficult to make any improvements beyond the settings in the provided code. I tried increasing the number of epochs and it didn't seem to any effect. Also, after I increased the number of epochs, I began to get matplot errors like this one:

Animation size has reached 21168704 bytes, exceeding the limit of 20971520.0. If you're sure you want a larger animation embedded, set the animation.embed

2. Provide a set of real and fake images:

OK, so most of these fake images look like someone left the heat on in a wax museum, but there are a few that aren't completely horrendous. I tried training longer as was suggested in the "Where to Go Next" section, but it didn't yield any improvements. It would be interesting to explore GANs that generate music.

