1. Ssh into ECE servers. Remember to connect to CMU VPN when you are doing this.
   ssh andrewid@ece005.ece.local.cmu.edu
   You'll be prompted for a password, use your CMU andrew account password.
   Server names run from ece000 to ece031.

2. Check your GPU availability and CUDA version using ***nvidia-smi***
3. Once you're logged in, by default, you'll be in the ***/afs/andrew.cmu.edu/usr23/andrewid/*** space. This has a limit of 2GB per user, so you'll need to use the ECE space (***/afs/ece.cmu.edu/usr/andrewid/).*** To check your available quota in the ECE or andrew space, use the command **fs lq**
4. The default python version is 3.6. If you need a higher version like 3.8, in the ECE space, download and install miniconda (check the link for the latest version)
   a. wget https://repo.anaconda.com/miniconda/Miniconda3-latest-Linux-x86_64.sh
      bash Miniconda3-latest-Linux-x86_64.sh
      (Accept the default location while you are installing)
   b. In the Andrew space (*/afs/andrew.cmu.edu/usr23/andrewid/*), create a bashrc file and specify the miniconda installation path in it.
      nano ~/.bashrc
      export PATH="/afs/ece.cmu.edu/usr/andrewid/miniconda3/bin:$PATH"
      Save the file and close it
   c. Source the bashrc file
      source ~/.bashrc
   d. Initialize conda and check it's version
      conda init
      conda --version
      Everytime before running any of your code, you'll need to source your bashrc file. You should then be in the default conda environment '**base**'.
5. In your ECE space, create a new conda environment if required. You'll find the below commands useful to create, activate or deactivate the conda environment.
   conda create --name myenv python=3.8
   conda activate myenv
   conda deactivate
6. Once you have activated your conda environment, you'll likely need to install Python packages. By default, this uses the cache directory in the andrew space, so the installation will fail for larger packages like torch. To avoid that, create a directory in your ECE space, and specify that as the cache directory while installing
   pip install matplotlib --cache-dir=/path/cache_dir
   Remember to install the correct pytorch version for your CUDA driver (pytorch versions)

—---------- *Happy training :)* —----------