Setup an amazon EC2 instance

1. Sign up for [Amazon AWS](https://aws.amazon.com/) using either your personal or the university email address.
2. As Dinc mentioned in his *Getting Started With Convolutional Neural Networks*, apply for both [github student](https://education.github.com/pack) and [AWS Educate](https://aws.amazon.com/education/awseducate/) using university email address. This should give you about $40 of credit to use on Amazon AWS. You can redeem the promo code for the credit [here](https://console.aws.amazon.com/billing/home?#/credits).
3. Sign into your AWS console, launch a new EC2 instance from the Services tab, select Amazon Linux AMI (HVM) image, then choose an Instance Type. T2.micro is perfect for practices although it barely has the capacity to do any real work, and Dinc recommended g2.2xlarge for real training work.
4. Press the connect button, you can find an instruction for how to connect to the instance via terminal. The command should look something like this:

ssh –i your\_key.pem ec2-user@instance\_address

cd into the directory with your key, type the command, and you should connect to the instance.

1. From [my github repository](https://github.com/ty3gx/BirdID_lsagne) you can find the code I modified from Dinc’s original code. From a separate terminal, Compress everything you need (BirdID\_lasagne code and the image set) using tar:

tar cvf file\_name.tgz folder\_name

Upload the compressed file to Amazon EC2 [using scp command](http://angus.readthedocs.io/en/2014/amazon/transfer-files-between-instance.html):

scp –i your\_key.pem directory\_to\_file/file\_name.tgz ec2-user@instance\_address:directory/file\_name.tgz

1. Extract the compressed gzip file, cd into BirID\_lasagne directory, run setup.sh file (./setup.sh) to setup the environment needed for the CNN network. You can look into the .sh file to see how I set up the environment needed.
2. Activate the new Python virtualenv:

. sk-learn/bin/activate

*You should now be able to run the python script to train the network.*

1. Remember to shut down the instance once you’re finished:

sudo shutdown –h now

Or you can choose to skip process 7 and 8 and run run\_and\_stop.sh in the BirdID\_lasagne folder. It will automatically train the network using train\_net\_tvt.py script and default configuration. It will also shut down the instance once training is finished.