**tensorflow jupyter instructions:**

**To log in:**

**open git bash**

**ssh -i 'C:\Users\Stevan\.aws\MyKey.pem' ubuntu@54.92.160.127**

**(use cuda toolkit 8.0 and cudnn 5.0 and latest tensorflow)**

first install a gpu instance in aws (allocate atleast 20 GB)

ssh into the isntance with git bash (right click desktop and run git bash)

link here: http://yangjie.me/2015/08/26/Run-Jupyter-Notebook-Server-on-AWS-EC2/

cd ~

|  |
| --- |
|  |
|  |
|  | wget http://repo.continuum.io/archive/Anaconda3-4.4.0-Linux-x86\_64.sh |
|  | bash Anaconda3-4.4.0-Linux-x86\_64.sh -b |
|  | echo 'PATH="/home/ubuntu/anaconda3/bin:$PATH"' >> .bashrc |
|  | . .bashrc |
|  |  |
|  | jupyter notebook --generate-config |
|  |  |
|  | key=$(python -c "from notebook.auth import passwd; print(passwd())") |
|  |  |
|  | cd ~ |
|  | mkdir certs |
|  | cd certs |
|  | certdir=$(pwd) |
|  | openssl req -x509 -nodes -days 365 -newkey rsa:1024 -keyout mycert.key -out mycert.pem |
|  |  |
|  | cd ~ |
|  | sed -i "1 a\ |
|  | c = get\_config()\\ |
|  | c.NotebookApp.certfile = u'$certdir/mycert.pem'\\ |
|  | c.NotebookApp.keyfile = u'$certdir/mycert.key'\\ |
|  | c.NotebookApp.ip = '\*'\\ |
|  | c.NotebookApp.open\_browser = False\\ |
|  | c.NotebookApp.password = u'$key'\\ |
|  | c.NotebookApp.port = 8888" .jupyter/jupyter\_notebook\_config.py |

now run this:

tmux new -s nb  
mkdir notebook  
cd notebook  
jupyter notebook

finally open https://{public DNS}:8888/

jupyter should be running!

**now for tensor flow!**

now run instructions found at: http://max-likelihood.com/2016/06/18/aws-tensorflow-setup/

i.e. run this (get the latest)

OR go to the official cuda toolkit docs.

http://docs.nvidia.com/cuda/cuda-installation-guide-linux/#axzz4RAEQUd3Z

cd ~cd

sudo apt-get install gcc

check the video card: $ lspci | grep -i nvidia

sudo apt-get update && sudo apt-get -y upgrade

sudo apt-get -y install linux-headers-$(uname -r) linux-image-extra-`uname -r`

wget http:// http://developer.download.nvidia.com/compute/cuda/repos/ubuntu1604/x86\_64/[cuda-repo-ubuntu1604\_8.0.61-1\_amd64.deb](http://developer.download.nvidia.com/compute/cuda/repos/ubuntu1604/x86_64/cuda-repo-ubuntu1604_8.0.61-1_amd64.deb)

sudo dpkg -i cuda-repo-ubuntu1604\_8.0.61-1\_amd64.deb

sudo rm cuda-repo-ubuntu1404\_8.0.44-1\_amd64.deb

sudo apt-get update

sudo apt-get install -y cuda

now get CUDNN from dropbox. (get the latest)

CUDNN\_FILE=cudnn-8.0-linux-x64-v5.1.tgz

sudo wget https://www.dropbox.com/s/90a3rhw2lg28r4w/cudnn-8.0-linux-x64-v5.1.tgz

sudo tar xvzf cudnn-8.0-linux-x64-v5.1.tgz

sudo rm cudnn-8.0-linux-x64-v5.1.tgz

sudo cp cuda/include/cudnn.h /usr/local/cuda/include

# move library files to /usr/local/cuda

sudo cp cuda/lib64/libcudnn\* /usr/local/cuda/lib64

sudo chmod a+r /usr/local/cuda/include/cudnn.h /usr/local/cuda/lib64/libcudnn\*

sudo rm -rf ~/cuda #maybe be careful here... get libcudart.so.7.5 missing

set up paths

echo 'export CUDA\_HOME=/usr/local/cuda

export CUDA\_ROOT=/usr/local/cuda

export PATH=$PATH:$CUDA\_ROOT/bin:$HOME/bin

export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATH:$CUDA\_ROOT/lib64

' >> ~/.bashrc

Also set up shell environment variables

export LD\_LIBRARY\_PATH="$LD\_LIBRARY\_PATH:/usr/local/cuda/lib64"

export CUDA\_HOME=/usr/local/cuda

now reboot ubuntu from aws

now set up tensor flow inside jypter!!

$ conda install pip

pip install --upgrade protobuf

pip install --upgrade pywrap

pip install https://storage.googleapis.com/tensorflow/linux/gpu/tensorflow-0.11.0-cp27-none-linux\_x86\_64.whl --ignore-installed

now get kaggle data:

cd /home/

sudo wget https://www.dropbox.com/s/cyfc6jpx8994cjy/train.zip

!!unzip train.zip -d Train

#Now unzip:

#check to see if files are there (in terminal)

# cd Train

# cd train

# ls -a

NOW USE THIS PAGE TO PUSH AND PULL GIT COMMANDS

http://dont-be-afraid-to-commit.readthedocs.io/en/latest/git/commandlinegit.html

WARNING I've SET THE MESSAGE WHEN SETTING UP THE SSH KEYS TO BE "pluto"

Clone Repo if it's new.

git clone git@github.com:Plutonicx/transfer\_learning\_stack\_exchange.git