1. Terminal: python –version # get the python version
2. Terminal: Which python # python install location
3. Terminal: ls -l /usr/bin/python #details location of python

Where is python? (Usually)

1. Miniforge:
   1. /Users/mdsanowarhossain/miniforge3/bin/python
2. Miniconda:
   1. /Users/mdsanowarhossain/opt/miniconda3/bin/python
3. HomeBrew Miniforge:
   1. /Users/mdsanowarhossain/opt/homebrew/Claskroom/miniforge/base/bin/python

Install URLS:

1. Miniforge:
   1. <https://developer.apple.com/metal/tensorflow-plugin/>
2. Miniconda:
   1. https://docs.conda.io/en/latest/miniconda.html

Install Mini forge:

1. Brew
2. cd miniforge3/bin/conda
3. conda init zsh
4. restart terminal
5. cd t81\_558\_deep\_learning
6. conda install -y jupyter
7. conda deactivate
8. conda env create -f tensorflow-apple-metal.yml -n tensorflow
9. conda activate tensorflow
10. python -m ipykernel install –user -name tensorflow –display-name “python 3.9 (tensorflow)”
11. conda activate base # back to the default
12. jupyter notebook
13. base: cat .zshrc
14. mv ./ .zshrc ./start\_miniforge.sh
15. restart window
16. python –version
17. source ./start\_miniforge.sh
18. base:

Install miniconda:

1. cd downloads
2. ls
3. downloads: ./Miniconda3-py39\_...sh
4. are you continue for 64-bit: yes
5. do you wish the installation to initialize Miniconda3 by running conda init: no
6. cd ..
7. cd miniconda3/bin
8. conda
9. ./conda init zsh
10. Which python
11. Cd
12. Cat .zshrc
13. mv ./ .zshrc ./start\_miniconda.sh
14. ls \*.sh
15. which python
16. source start\_miniforge.sh
17. conda env list
18. source ./start\_miniconda.sh
19. conda env list
20. conda activate

===============this is need to install for my Mac M1===========

Installing TensorFlow 2.x with Keras (Mac M1 (Apple Metal) GPU Version:

home brew:

1. /bin/bash -c "$(curl -fsSL <https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh>)"
2. Restart terminal
3. Brew
4. xcode-select –install

Install Miniforge: this is the next step

1. brew install miniforge
2. which python
3. conda init zsh
4. conda install -y jupyter
5. conda env create -f tensorflow-apple-metal.yml -n tensorflow

#Need to update package then just delete it by manually and recreate it.

1. Conda tensorflow activate
2. conda install nb\_conda
3. python -m ipykernel install --user --name tensorflow --display-name "Python 3.9 (tensorflow)"
4. jupyter notebook