### Create a virtual environment for your project

1. In the terminal client enter the following where *yourenvname* is the name you want to call your environment, and replace *x.x* with the Python version you wish to use. (To see a list of available python versions first, type conda search "^python\$" and press enter.)

conda create -n yourenvname python=x.x anaconda

Press y to proceed. This will install the Python version and all the associated anaconda packaged libraries at "path\_to\_your\_anaconda\_location/anaconda/envs/yourenvname"

#### Activate your virtual environment.

1. To activate or switch into your virtual environment, simply type the following where *yourenvname* is the name you gave to your environement at creation.

source activate yourenvname

• Activating a conda environment modifies the PATH and shell variables to point to the specific isolated Python set-up you created. The command prompt will change to indicate which conda environemnt you are currently in by prepending (yourenvname). To see a list of all your environments, use the command conda info -e.

# Install additional Python packages to a virtual environment.

1. To install additional packages only to your virtual environment, enter the following command where *yourenvname* is the name of your environemnt, and [package] is the name of the package you wish to install. Failure to specify "-n yourenvname" will install the package to the root Python installation.

conda install -n yourenvname [package]

To install pytorch:

conda install pytorch torchvision cudatoolkit=10.2 -c pytorch

Deactivate your virtual environment.

1. To end a session in the current environment, enter the following. There is no need to specify the envname - which ever is currently active will be deactivated, and the PATH and shell variables will be returned to normal.

source deactivate

## Delete a no longer needed virtual environment

1. To delete a conda environment, enter the following, where *yourenvname* is the name of the environment you wish to delete.

conda remove -n yourenvname -all

### Steps to verify the install:

- 1. To use PyTorch we import torch.
- 2. To check the version, we use torch.\_\_version\_\_

Now, to verify our GPU capabilities, we use torch.cuda.is\_available() and check the cuda version.

> torch.cuda.is\_available()
True
> torch.version.cuda
'10.2'

# References:

- 1. https://uoa-eresearch.github.io/eresearch-cookbook/recipe/2014/11/20/conda/
- 2. https://deeplizard.com/learn/video/UWlFM0R\_x6I