Install CUDA in Windows for NVIDIA GPU

* Open cmd in admin mode by pressing Win+R -> type cmd -> type *nvidia-smi*. The compatible version of CUDA will be displayed there.
* Download and install Visual studio (community version will work)
* Download the appropriate CUDA version (eg: type CUDA 11.7 download in google and get the download link)
* Install python version 3.10.11
* Once the appropriate version of CUDA (version 1.18) is installed, verify if CUDA is installed properly by using the command *nvcc --version*

**NOTE:** The above step may throw an error. To fix it, close the existing command prompt window and load up a new one then try step 2 again

* Use command pip3 install torch torchvision torchaudio --index-url <https://download.pytorch.org/whl/cu118> OR pip3 install torch torchvision torchaudio --index-url <https://download.pytorch.org/whl/cu117>

Installing CUDNN

Go to link <https://developer.nvidia.com/rdp/cudnn-archive> and download the cudnn version compatible with your cuda version

* Once the zip file is downloaded, extract it in desired location. This folder will have 3 subfolders: *bin, include,* and *lib*
* Copy the contents of each folder into its corresponding folder located in C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v11.4 (example copy contents of bin folder in the downloaded zip file into the bin folder in the location mentioned)

Installing Zlib

* Go to link [https://docs.nvidia.com/deeplearning/cudnn/install-guide/index.html#install-window](https://docs.nvidia.com/deeplearning/cudnn/install-guide/index.html#install-windows)
* Go to section 2.1.3 and pay attention to installation procedure of Zlib
* Download the zlib package from the link that is there in step 1 of section 2.1.3
* Type edit system environment variables in windows search
* Click *Environment Variables*
* In *System Variables* look for the *Path* variable. Double-click on it
* Click *New* -> *Browse*. Then navigate to the extracted Zlib folder (choose the dll\_x64 folder) downloaded in step 3. Click OK after done

To Remove CUDA

* *conda remove cuda*