Deep Learning for Computer Vision

1 Conda Environment Installation

Please refer here for download anaconda navigator.

1.1 Windows

- 1. Get the download link here.
- 2. Follow the steps and check the list (Add Anaconda3 to the PATH environment variable) (Please see below for reference).



3. Open the Command Prompt and type **conda** to verify the installation.

1.2 Linux

1. Open the command prompt and execute the following command

 $wget\ https://repo.anaconda.com/archive/Anaconda 3-2024.06-1-Linux-x86_64.sh$

2. Run the shell script by typing:

sh Anaconda3-2024.06-1-Linux-x86_64.sh

3. Accept the terms by typing yes.

- 4. Confirm the installation location by pressing **Enter**.
- 5. Wait until the download finishes.
- 6. Close the terminal and open the command prompt.
- 7. Conda should activate automatically, showing (base) at the beginning of the prompt.
- 8. If not, activate conda by executing the following command:

source ~/.bashrc

9. Verify by execute **conda**.

2 Creating Conda environment

- Create a conda environment by conda create -n env_name python=version_num -y (use env_name as vision and version_num as 3.8).
- 2. For activating the conda environment conda activate env_name
- 3. For checking available environments by executing **conda env list** (* represents the current environment)

3 Vs Code installation

3.1 Windows/Linux

- 1. For windows get the download link here.
- 2. For Linux get the download link here
- 3. Following the instructions and install.
 - For Linux: Open the .deb file and click install.

3.1.1 Installing Environments

After finishing the installation

- Open the Extensions icon from the toolbar at leftside or press ctrl+shift+X
 and install Python and Jupyter (blue tick by Microsoft) environments for
 VS-code.
- 2. Open new terminal from **Terminal** tab at top or press **ctrl+shift+**'. Command prompt will open at bottom.



- 3. Select Command Prompt shell (if not selected by default).
- 4. Activate the conda environment that we created above.
- 5. Run the following command to install 'ipykernel' kernel into the Python environment.

 ${\bf conda\ install\ -n\ env_name\ ipykernel\ -update-deps\ -force-reinstall} \ ({\bf replace\ env_name\ with\ particular\ conda\ environment\ name})$

4 Setup Jupyter notebook

- 1. Clone the following GitHub repository by executing git clone https://github.com/Revanth1304/CVRDE_Lab_session.git
- 2. Open the necessary.ipynb file and select the kernel by clicking **Select Kernel** at right side of 1^{st} cell and check the environment name from the list if not click **Select Another Kernel** and select the corresponding environment.



3. Finally execute the cell.