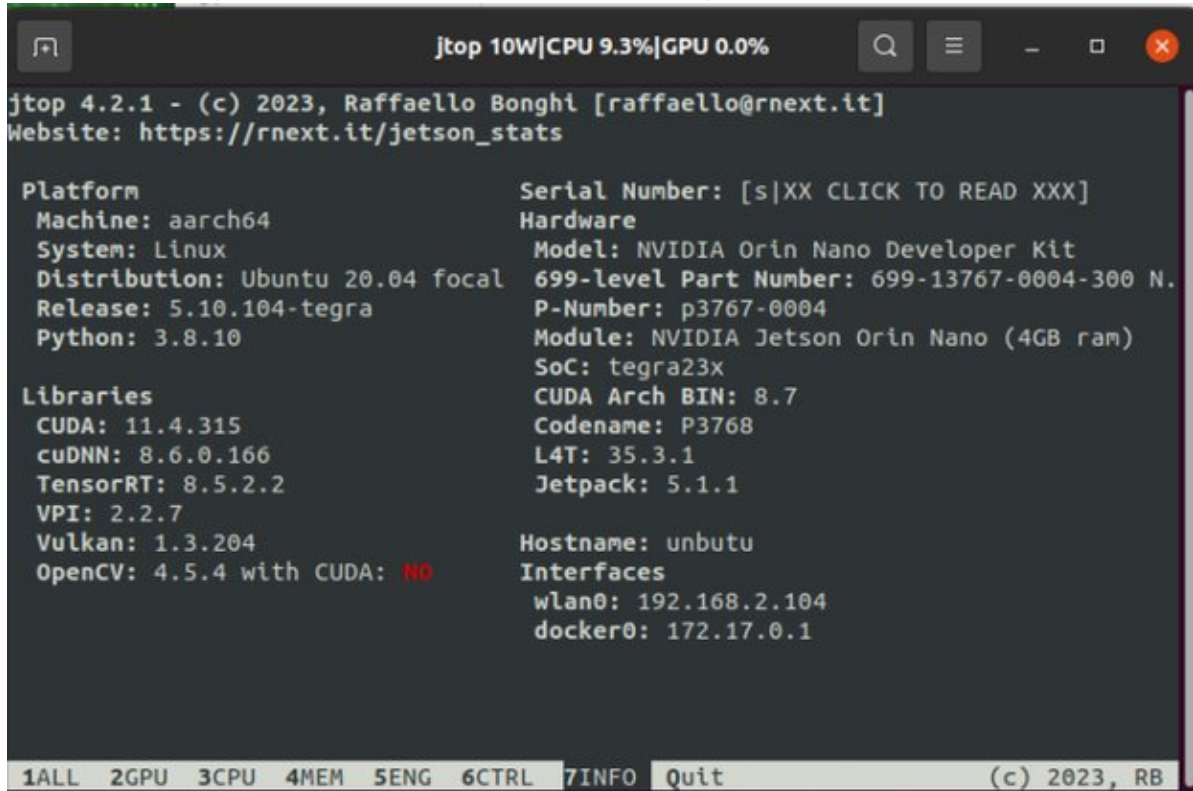


Install Torch&&Torchvision

Instructions before use: This tutorial is aimed at users who have built their own environment. If you are using the Yahboom version of the image, you can ignore it and not read it

The system configuration of this tutorial is shown in the figure:

A screenshot of a terminal window titled 'jtop 10W|CPU 9.3%|GPU 0.0%'. The terminal displays the output of the 'jtop' command, which provides system and hardware information. The output is organized into sections: Platform (Machine: aarch64, System: Linux, Distribution: Ubuntu 20.04 focal, Release: 5.10.104-tegra, Python: 3.8.10), Serial Number (s|XX CLICK TO READ XXX), Hardware (Model: NVIDIA Orin Nano Developer Kit, 699-level Part Number: 699-13767-0004-300 N, P-Number: p3767-0004, Module: NVIDIA Jetson Orin Nano (4GB ram), SoC: tegra23x, CUDA Arch BIN: 8.7, Codename: P3768, L4T: 35.3.1, Jetpack: 5.1.1), Libraries (CUDA: 11.4.315, cuDNN: 8.6.0.166, TensorRT: 8.5.2.2, VPI: 2.2.7, Vulkan: 1.3.204, OpenCV: 4.5.4 with CUDA: NO), Hostname (unbutu), and Interfaces (wlan0: 192.168.2.104, docker0: 172.17.0.1). The bottom of the terminal shows a navigation bar with options: 1ALL, 2GPU, 3CPU, 4MEM, 5ENG, 6CTRL, 7INFO, and Quit, along with the copyright notice '(c) 2023, RB'.

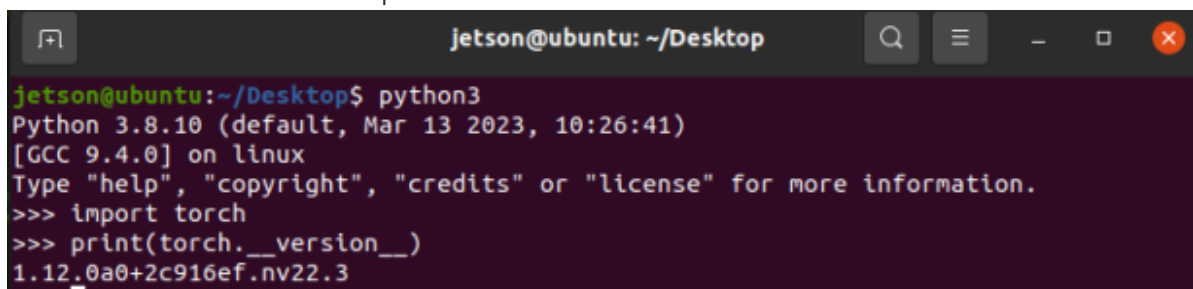
1.install torch

Find the WHL file in the torch folder under the attachment and upload it to jieson orinano

```
pip3 install torch-xxx.whl
```

Note: If you directly install the pip3 store without a GPU version, subsequent training models may report errors. To find a GPU version, you must go to the Jetson official website

Wait for the installation to complete

A screenshot of a terminal window titled 'jetson@ubuntu: ~/Desktop'. The terminal shows the execution of 'python3' and the installation of 'torch'. The output indicates that Python 3.8.10 (default, Mar 13 2023, 10:26:41) [GCC 9.4.0] on linux is being used. The user enters 'import torch' and 'print(torch.__version__)', resulting in the output '1.12.0a0+2c916ef.nv22.3'.

2.install torchvision

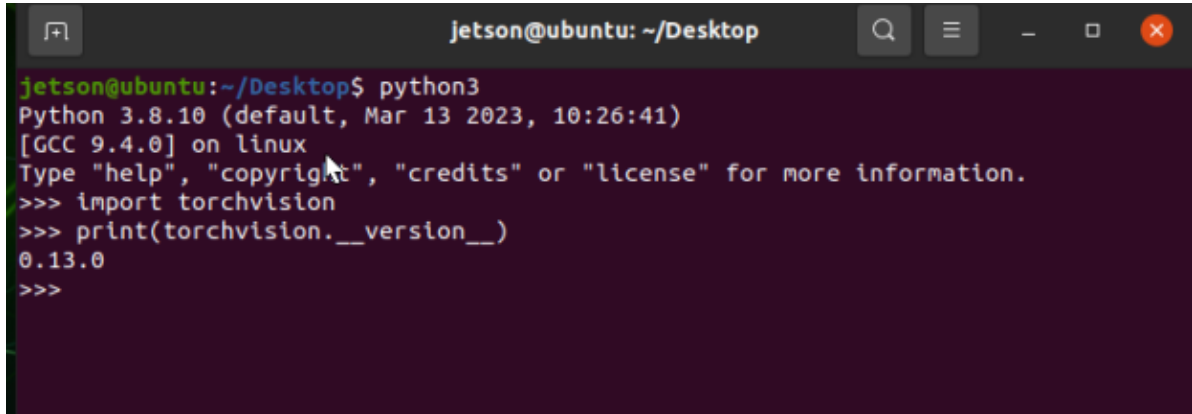
Find the version corresponding to torch through this website

<https://github.com/pytorch/vision>

If the torch is found to be 1.12, then the torch vision is 0.13.0

```
sudo apt-get install libjpeg-dev zlib1g-dev libpython3-dev libavcodec-dev  
libavformat-dev libswscale-dev  
git clone --branch v0.13.0 https://github.com/pytorch/vision torchvision  
cd torchvision  
export BUILD_VERSION=0.13.0  
python3 setup.py install --user
```

Wait for the installation to complete



```
jetson@ubuntu: ~/Desktop  
jetson@ubuntu:~/Desktop$ python3  
Python 3.8.10 (default, Mar 13 2023, 10:26:41)  
[GCC 9.4.0] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> import torchvision  
>>> print(torchvision.__version__)  
0.13.0  
>>>
```