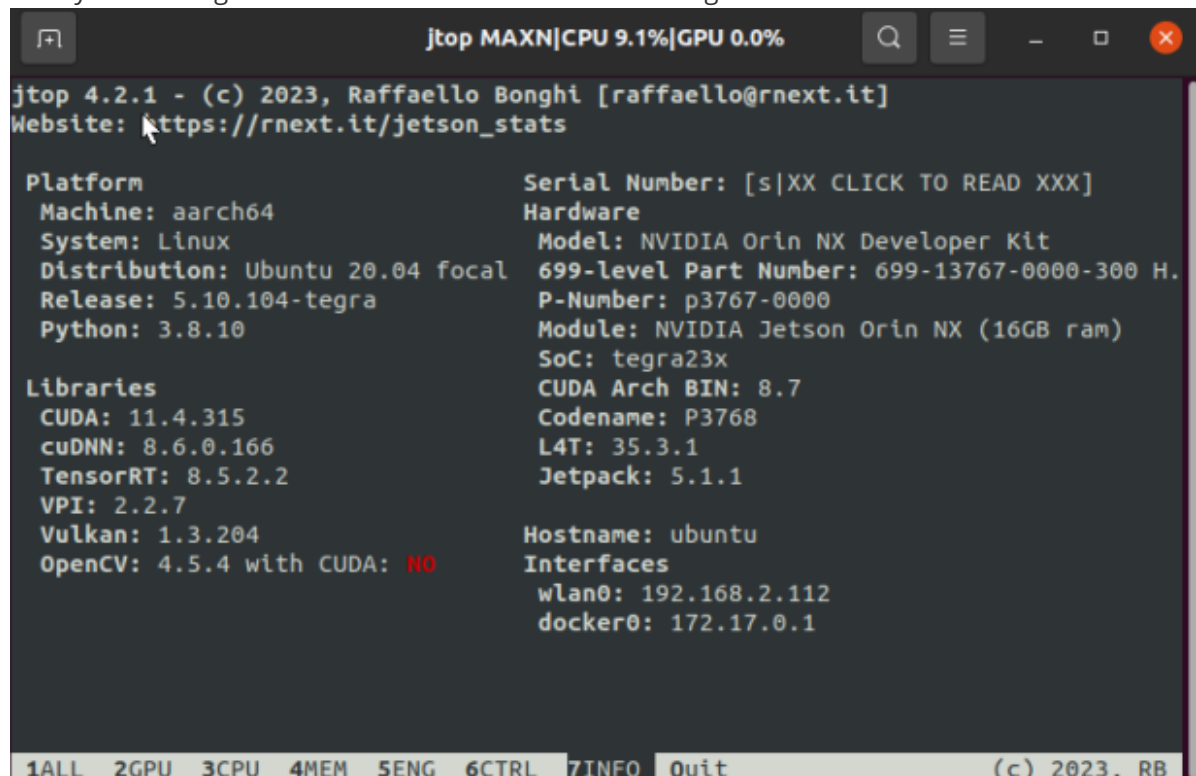


Install Torch&&Torchvision

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:



```
jtop MAXN|CPU 9.1%|GPU 0.0%
jtop 4.2.1 - (c) 2023, Raffaello Bonghi [raffaello@rnext.it]
Website: https://rnext.it/jetson_stats

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 NX Developer Kit
699-level Part Number: 699-13767-0000-300 H.
P-Number: p3767-0000
Module: NVIDIA Jetson Orin NX (16GB 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: ubuntu
Interfaces
wlan0: 192.168.2.112
docker0: 172.17.0.1

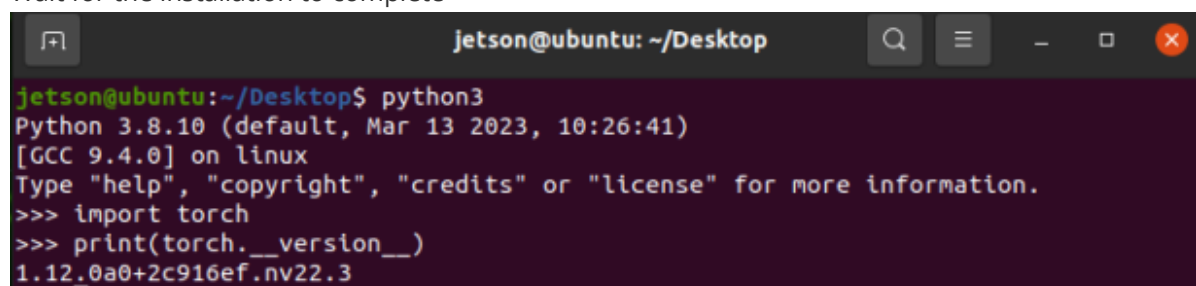
1ALL 2GPU 3CPU 4MEM 5ENG 6CTRL 7INFO Quit (c) 2023, RB
```

1.install torch

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

```
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



```
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 torch
>>> print(torch.__version__)
1.12.0a0+2c916ef.nv22.3
```

2.install torchvision

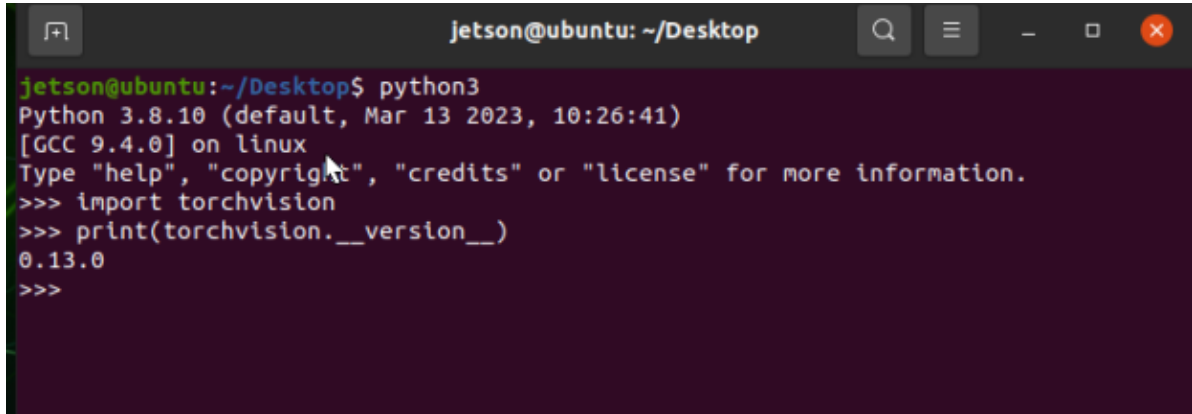
Find the version corresponding to torch through this website

<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

A terminal window titled 'jetson@ubuntu: ~/Desktop' with standard window controls. The terminal shows the execution of 'python3', which displays 'Python 3.8.10 (default, Mar 13 2023, 10:26:41) [GCC 9.4.0] on linux'. It then prompts for help, copyright, credits, or license. The user enters '>>> import torchvision' and '>>> print(torchvision.__version__)', resulting in the output '0.13.0' and a final '>>>' prompt.

```
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
>>>
```