

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: kttps://rnext.it/jetson_stats
Platform
                                  Serial Number: [s|XX CLICK TO READ XXX]
 Machine: aarch64
                                  Hardware
                                   Model: NVIDIA Orin NX Developer Kit
 System: Linux
 Distribution: Ubuntu 20.04 focal 699-level Part Number: 699-13767-0000-300 H.
 Release: 5.10.104-tegra
                                  P-Number: p3767-0000
 Python: 3.8.10
                                   Module: NVIDIA Jetson Orin NX (16GB ram)
                                   SoC: tegra23x
Libraries
                                   CUDA Arch BIN: 8.7
 CUDA: 11.4.315
                                   Codename: P3768
 cuDNN: 8.6.0.166
 TensorRT: 8.5.2.2
                                   Jetpack: 5.1.1
 VPI: 2.2.7
                                  Hostname: ubuntu
 Vulkan: 1.3.204
 OpenCV: 4.5.4 with CUDA:
                                  Interfaces
                                   wlan0: 192.168.2.112
                                   docker0: 172.17.0.1
1ALL 2GPU 3CPU 4MEM 5ENG 6CTRL 7INFO Ouit
```

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 Q = _ □ 🛇

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

```
jetson@ubuntu: ~/Desktop

jetson@ubuntu: ~/Desktop

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
>>>
```

appendix

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