

Mediapipe environment

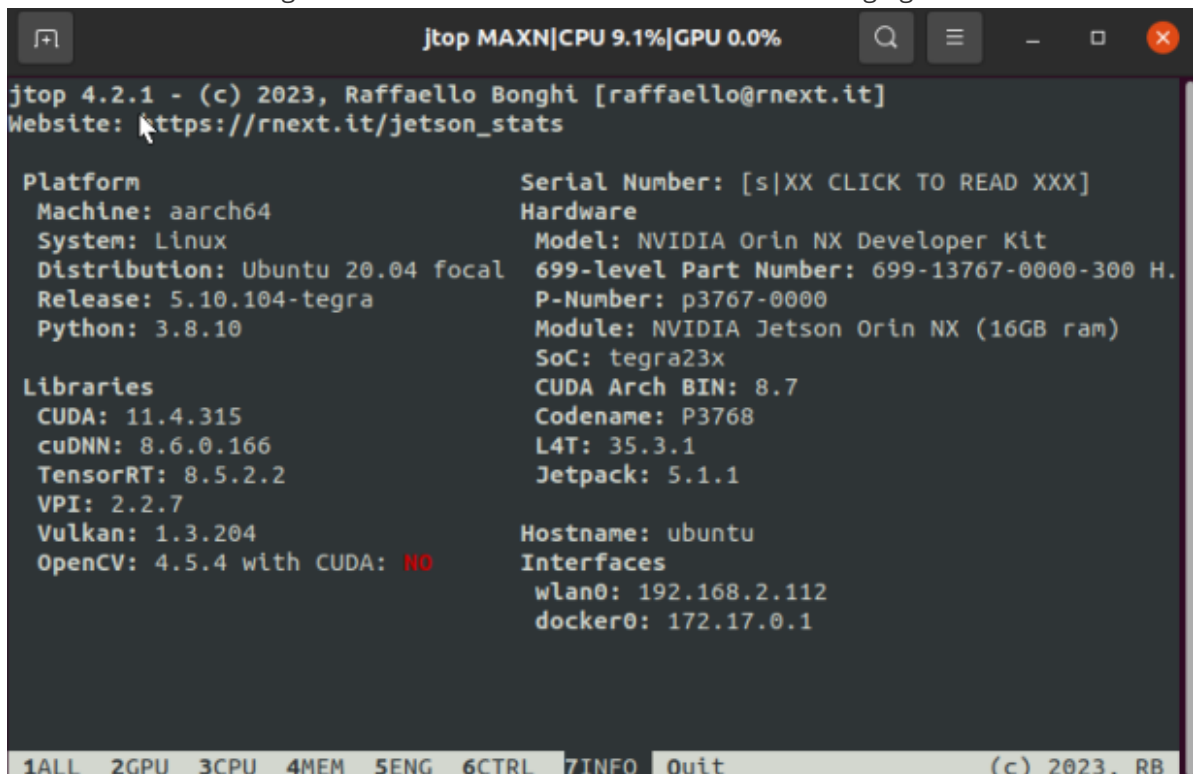
Mediapipe environment

- 1.Instructions before use
2. Environmental construction

1.Instructions before use

This tutorial is applicable to self built images. If you are using the YAHBOOM version of the image, this tutorial can be ignored

The environment configuration for this tutorial is shown in the following 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
```

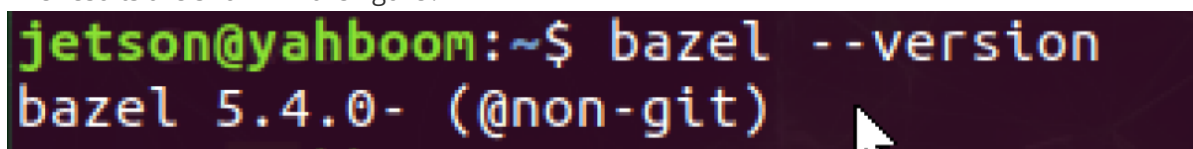
2. Environmental construction

1. Directly set up bazel and mediapipe-0.8.4-cp38-cp38-Linux in the attachment of the environment_ Transfer two files aarch64.whl to Jetson orin nx
2. Run the following command on Jetson orin nx

```
sudo chmod +x bazel
mv bazel /usr/local/bin
```

Enter the following command:bazel --version

The results are shown in the figure:



```
jetson@yahboom:~$ bazel --version
bazel 5.4.0- (@non-git)
```

3. install mediapipe

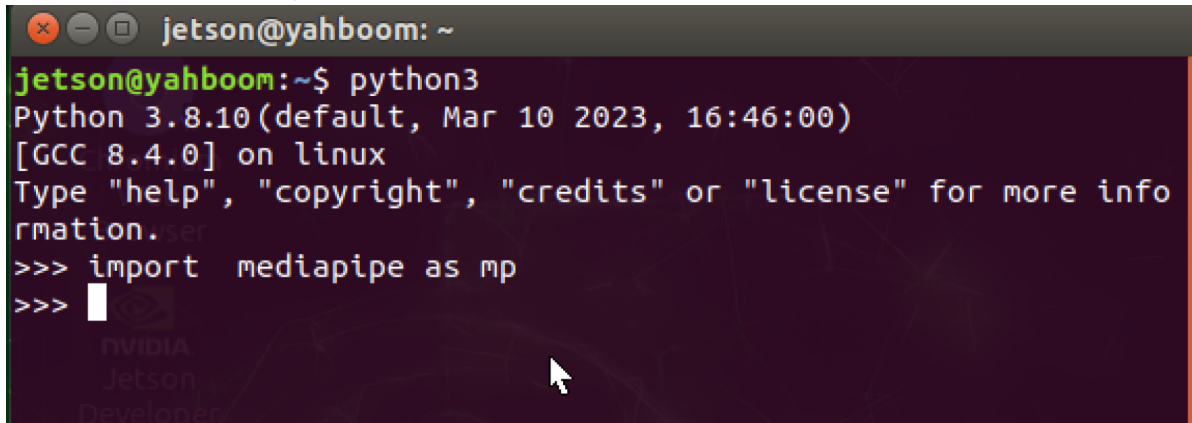
```
pip3 install opencv-contrib-python==3.4.17.63
pip3 install mediapipe-0.8.4-cp38-cp38-linux_aarch64.whl
pip3 uninstall opencv-contrib-python
```

4. Verify if the installation was successful

```
python3

import mediapipe as mp
```

If there are no errors reported, it indicates successful installation

A terminal window titled 'jetson@yahboom: ~' with a dark background. The user has entered 'python3' at the prompt, which has resulted in the Python 3.8.10 shell. The shell output shows 'Python 3.8.10 (default, Mar 10 2023, 16:46:00) [GCC 8.4.0] on linux' and a prompt to type 'help', 'copyright', 'credits', or 'license' for more information. The user then enters '>>> import mediapipe as mp' and another '>>>' prompt appears, indicating the import was successful. A faint NVIDIA Jetson Developer logo is visible in the background of the terminal window.

```
jetson@yahboom: ~
jetson@yahboom:~$ python3
Python 3.8.10 (default, Mar 10 2023, 16:46:00)
[GCC 8.4.0] on linux
Type "help", "copyright", "credits" or "license" for more info
>>> import mediapipe as mp
>>>
```