

Mediapipe environment

Mediapipe environment

1. Install Mediapipe
2. Verify Mediapipe

Mediapipe is a cross-platform framework provided by Google for building multi-modal (e.g. image, audio, video, etc.) processing pipelines.

1. Install Mediapipe

Use pip command to install mediapipe:

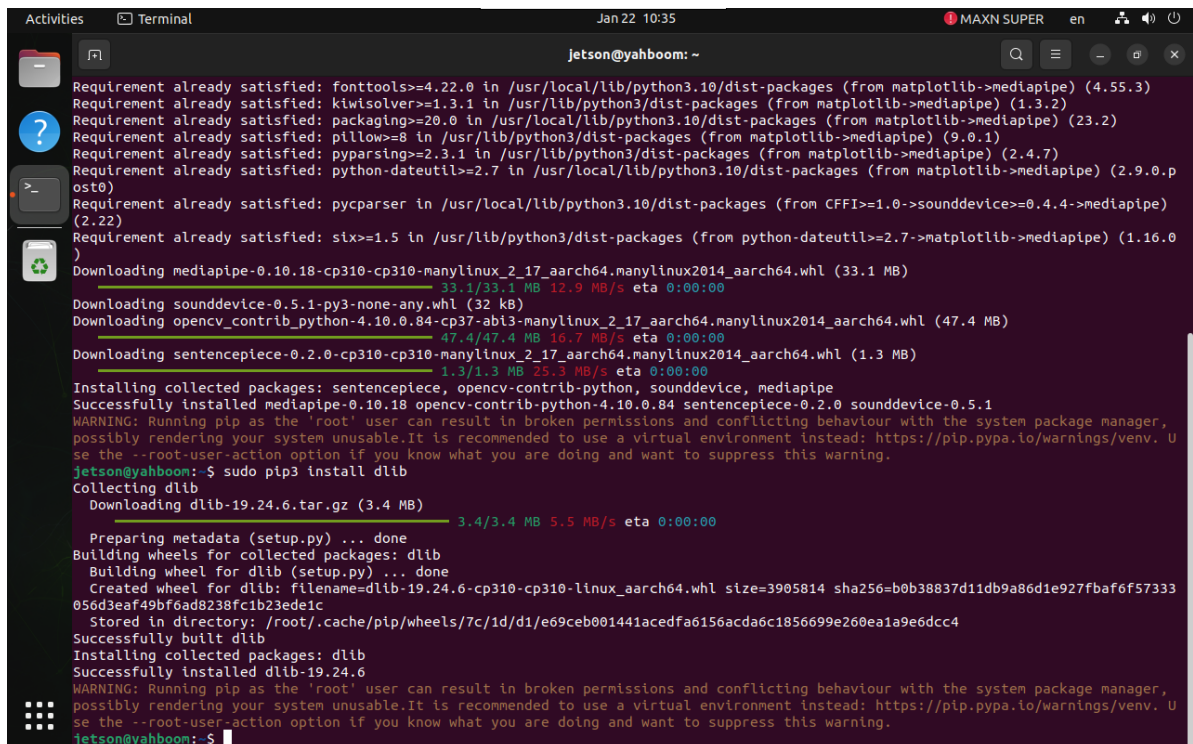
```
sudo pip3 install mediapipe
```

Use pip command to install OpenCV:

```
sudo pip3 install opencv-python
```

Use pip command to install dlib: Some cases require this library

```
sudo pip3 install dlib
```



```
Activities  Terminal  Jan 22 10:35  MAXN SUPER  en  [icons]
jetson@yahboom: ~
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib->mediapipe) (4.55.3)
Requirement already satisfied: kiwisolver>=1.3.1 in /usr/lib/python3/dist-packages (from matplotlib->mediapipe) (1.3.2)
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib->mediapipe) (23.2)
Requirement already satisfied: pillow>=8 in /usr/lib/python3/dist-packages (from matplotlib->mediapipe) (9.0.1)
Requirement already satisfied: pyparsing>=2.3.1 in /usr/lib/python3/dist-packages (from matplotlib->mediapipe) (2.4.7)
Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.10/dist-packages (from matplotlib->mediapipe) (2.9.0.post0)
Requirement already satisfied: pycparser in /usr/local/lib/python3.10/dist-packages (from CFFI>=1.0->sounddevice>=0.4.4->mediapipe) (2.22)
Requirement already satisfied: six>=1.5 in /usr/lib/python3/dist-packages (from python-dateutil>=2.7->matplotlib->mediapipe) (1.16.0)
Downloading mediapipe-0.10.18-cp310-cp310-manylinux_2_17_aarch64.manylinux2014_aarch64.whl (33.1 MB)
 33.1/33.1 MB 12.9 MB/s eta 0:00:00
Downloading sounddevice-0.5.1-py3-none-any.whl (32 kB)
Downloading opencv_contrib_python-4.10.0.84-cp37-abi3-manylinux_2_17_aarch64.manylinux2014_aarch64.whl (47.4 MB)
 47.4/47.4 MB 16.7 MB/s eta 0:00:00
Downloading sentencepiece-0.2.0-cp310-cp310-manylinux_2_17_aarch64.manylinux2014_aarch64.whl (1.3 MB)
 1.3/1.3 MB 75.7 MB/s eta 0:00:00
Installing collected packages: sentencepiece, opencv-contrib-python, sounddevice, mediapipe
Successfully installed mediapipe-0.10.18 opencv-contrib-python-4.10.0.84 sentencepiece-0.2.0 sounddevice-0.5.1
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager,
possibly rendering your system unusable.It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv. U
se the --root-user-action option if you know what you are doing and want to suppress this warning.
jetson@yahboom: $ sudo pip3 install dlib
collecting dlib
Downloading dlib-19.24.6.tar.gz (3.4 MB)
 3.4/3.4 MB 5.5 MB/s eta 0:00:00
  Preparing metadata (setup.py) ... done
Building wheels for collected packages: dlib
  Building wheel for dlib (setup.py) ... done
  Created wheel for dlib: filename=dlib-19.24.6-cp310-cp310-linux_aarch64.whl size=3905814 sha256=b0b38837d11db9a86d1e927fbaf6f57333
056d3eaf49bf6ad8238fc1b23ede1c
  Stored in directory: /root/.cache/pip/wheels/7c/1d/d1/e69ceb001441acedfa6156acda6c1856699e260ea1a9e6dcc4
Successfully built dlib
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jetson@yahboom: $
```

2. Verify Mediapipe

```
python3 -c "import mediapipe as mp; print(f'Mediapipe version: {mp.__version__}')"

```

```
Activities Terminal Jan 22 10:35 MAXN SUPER en
Jetson@yahboom: ~
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib->mediapipe) (23.2)
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Downloading sentencepiece-0.2.0-cp310-cp310-manylinux_2_17_aarch64.manylinux2014_aarch64.whl (1.3 MB)
1.3/1.3 MB 25.3 MB/s eta 0:00:00
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Collecting dlib
  Downloading dlib-19.24.6.tar.gz (3.4 MB)
3.4/3.4 MB 5.5 MB/s eta 0:00:00
  Preparing metadata (setup.py) ... done
Building wheels for collected packages: dlib
  Building wheel for dlib (setup.py) ... done
  Created wheel for dlib: filename=dlib-19.24.6-cp310-cp310-linux_aarch64.whl size=3905814 sha256=b0b38837d11db9a86d1e927fbaf6f57333056d3eaf49bf6ad8238fc1b23ede1c
  Stored in directory: /root/.cache/pip/wheels/7c/1d/d1/e69ceb001441acedfa6156acda6c1856699e260ea1a9e6dcc4
Successfully built dlib
Installing collected packages: dlib
Successfully installed dlib-19.24.6
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager, possibly rendering your system unusable. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv. Use the --root-user-action option if you know what you are doing and want to suppress this warning.
Jetson@yahboom:~$ python3 -c "import mediapipe as mp; print(f'Mediapipe version: {mp.__version__}')"
Mediapipe version: 0.10.18
Jetson@yahboom:~$
```