Jetson Orin Nano   OpenCV 4.8   CUDA

- Jetson Orin Nano   JetPack 5.x / 6.x
- CUDA + cuDNN   JetPack
- Python 3.8+

```
sudo apt update && sudo apt upgrade -y
sudo apt install -y build-essential cmake git pkg-config libgtk-3-dev \
libavcodec-dev libavformat-dev libswscale-dev libv4l-dev libxvidcore-dev \
libx264-dev libjpeg-dev libpng-dev libtiff-dev gfortran openexr \
libatlas-base-dev python3-dev python3-numpy libtbb2 libtbb-dev \
libdc1394-22-dev libgstreamer1.0-dev libgstreamer-plugins-base1.0-dev
```

OpenCV
```
mkdir -p ~/opencv_build && cd ~/opencv_build
git clone https://github.com/opencv/opencv.git
git clone https://github.com/opencv/opencv_contrib.git
cd opencv && git checkout 4.8.0
cd ../opencv_contrib && git checkout 4.8.0
```

CMake   CUDA
```
cd ~/opencv_build && mkdir -p build && cd build
cmake ../opencv -D CMAKE_BUILD_TYPE=RELEASE \
-D CMAKE_INSTALL_PREFIX=/usr/local \
-D OPENCV_EXTRA_MODULES_PATH=../opencv_contrib/modules \
-D ENABLE_NEON=ON -D WITH_CUDA=ON -D WITH_CUDNN=ON \
-D OPENCV_DNN_CUDA=ON -D CUDA_ARCH_BIN=8.7 \
-D WITH_TBB=ON -D WITH_V4L=ON -D WITH_OPENGL=ON \
-D BUILD_opencv_python3=ON -D BUILD_TESTS=OFF -D BUILD_EXAMPLES=OFF
```

```
make -j$(nproc)
sudo make install && sudo ldconfig
```

```
python3 -c 'import cv2; print(cv2.__version__); print(cv2.cuda.getCudaEnabledDeviceCount())'
```

OpenCV
```
sudo apt remove python3-opencv
```

- OpenCV   4.8.x
- CUDA   cv2.cuda