install opency 4.2 and contrib in ubantu linux

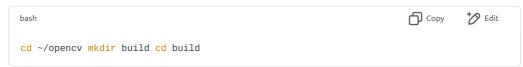
To install **OpenCV 4.2** with the **contrib modules** on **Ubuntu Linux**, follow these steps. This process compiles OpenCV from source, which gives you full flexibility and access to all contrib modules.

Step-by-Step Installation of OpenCV 4.2 + Contrib on Ubuntu

1. Install Dependencies



3. Create Build Directory



cd ~ git clone -b 4.2.0 https://github.com/opencv/opencv.git git clone -b 4.2.0

4. Configure with CMake



5. Compile (This may take 20–90 minutes)

Use -j with number of CPU cores, e.g., -j\$(nproc)

https://github.com/opencv/opencv_contrib.git

bash	Сору	* Edit
make -j\$(nproc)		

6. Install

bash	Сору	* Edit
sudo make install sudo ldconfig		

7. Verify Installation

Check version with Python:

bash	Сору	* Edit
<pre>python3 -c "import cv2; print(cv2version)"</pre>		

It should show 4.2.0.

Would you like help setting up a Python virtual environment with OpenCV 4.2 too?



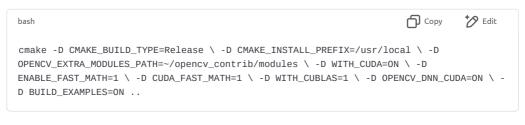
```
cmake -D CMAKE_BUILD_TYPE=Release \
-D CMAKE_INSTALL_PREFIX=/usr/local \
-D OPENCV_EXTRA_MODULES_PATH=~/opencv_contrib/modules \
-D BUILD_EXAMPLES=ON .. complie wit gpu
```

To compile OpenCV 4.2 with GPU (CUDA) support, you need to make sure your system has:

- An NVIDIA GPU
- CUDA and cuDNN installed
- Correct version compatibility between OpenCV 4.2, CUDA, and your NVIDIA driver

☑ Update CMake Command for GPU (CUDA) Support

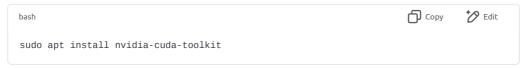
Here's the modified cmake command:



X Additional Setup Steps

1. Install CUDA and cuDNN

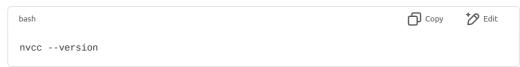
If you haven't already:



⚠ However, it's better to install CUDA and cuDNN directly from NVIDIA's website to match your GPU.

2. Check CUDA Availability

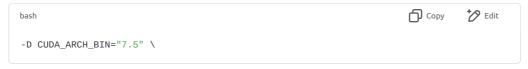
After installing, verify:



Make sure it's detected correctly.

3. Optional: Set Compute Capability

To optimize for your GPU, add:



Replace 7.5 with your GPU's compute capability (check here).

Example:



Look for:

- CUDA = YES
- cuDNN = YES (if used)
- NVIDIA GPU arch = present

Would you like help verifying if your GPU is compatible with CUDA and OpenCV 4.2?