OpenCV 4.13.0-dev
Open Source Computer Vision

Install OpenCV for Python with pip

This quick-start shows the **recommended** way for most users to get OpenCV in Python: install from **PyPI** with `pip`. It also explains virtual environments, platform notes, and common troubleshooting. If you need OS-specific alternatives (system packages or source builds), see the OS pages linked below, but those are **not required** for typical Python use.

> **Note**
> : OpenCV team maintains **PyPI** packages only. Conda distributions and platform specific builds are community builds and hardware vendor builds and may differ from the official one.

Quick start

```
# 1) Create and activate a virtual environment (recommended)
python -m venv .venv
# Windows:
.venv\Scripts\activate
# Linux/macOS:
source .venv/bin/activate

# 2) Upgrade pip tooling
python -m pip install --upgrade pip setuptools wheel

# 3) Install OpenCV from PyPI (choose ONE)
pip install opencv-python          # main package (most users)
# or
pip install opencv-contrib-python  # + extra modules (contrib)
# or
pip install opencv-python-headless # no GUI/backends (servers/CI)
# or
pip install opencv-contrib-python-headless # no GUI/backends with extra modules (servers/CI)
```

Tiny hello-world

```
import cv2 as cv
import numpy as np

print("OpenCV:", cv.__version__)
```