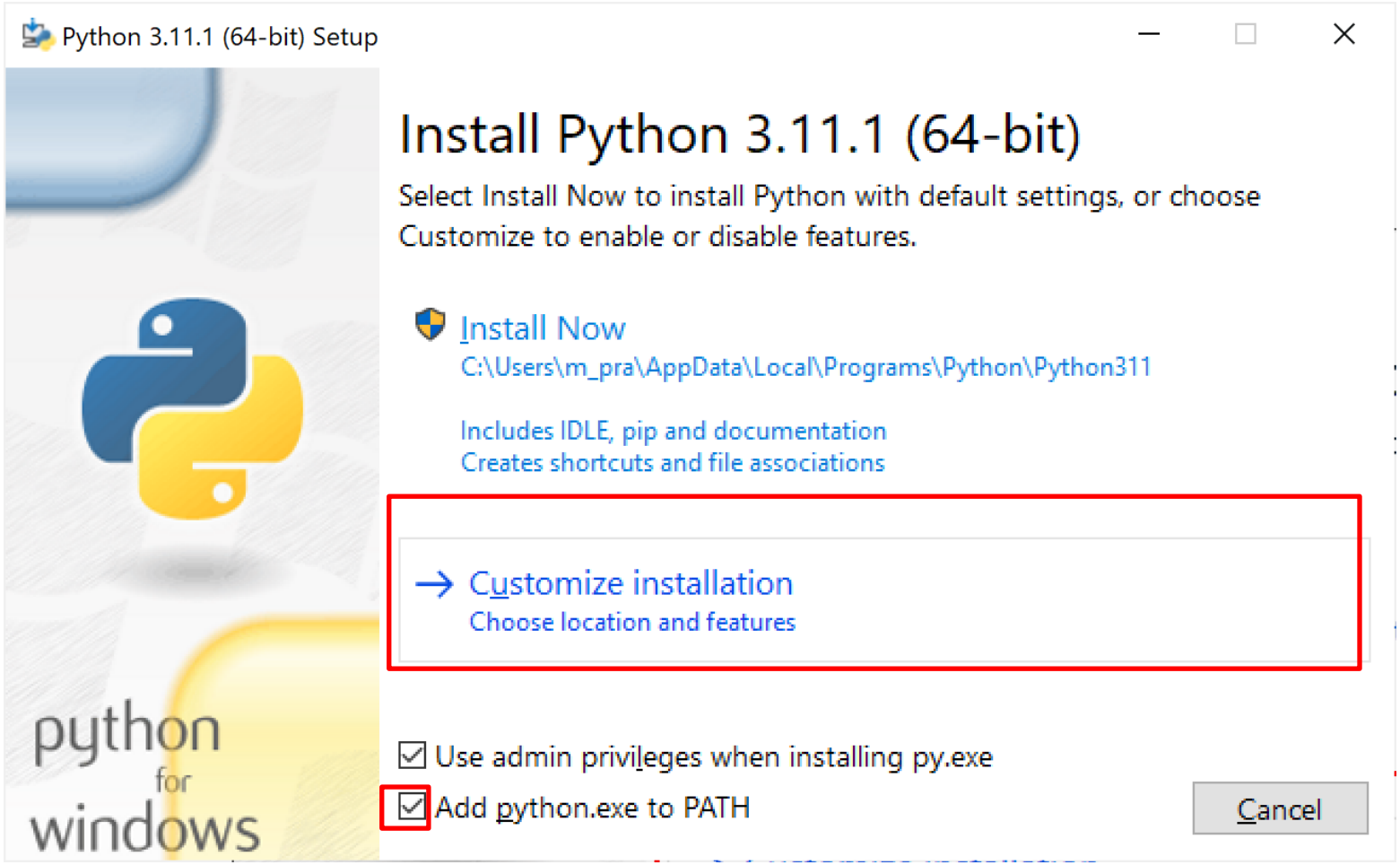
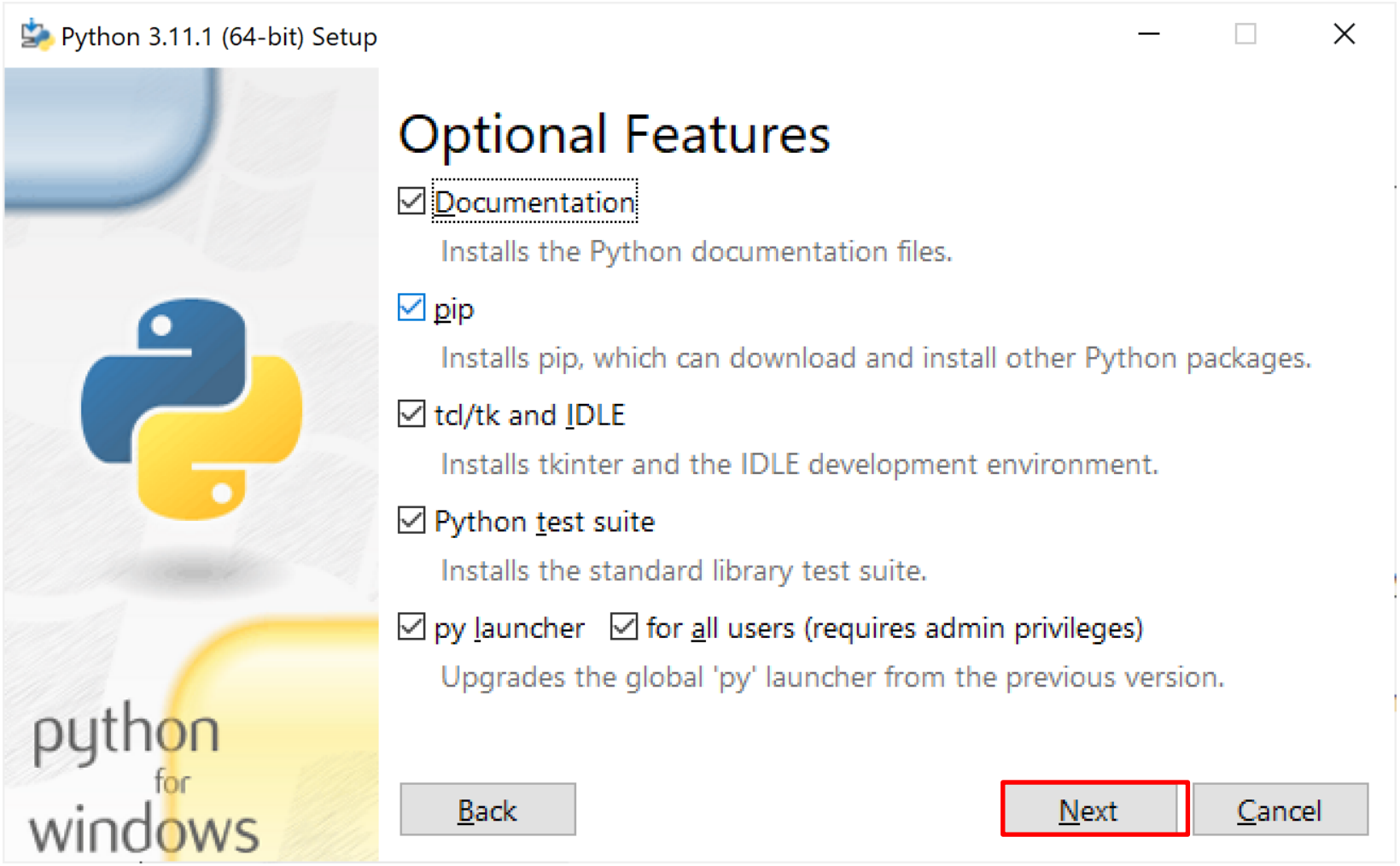
Required Installation

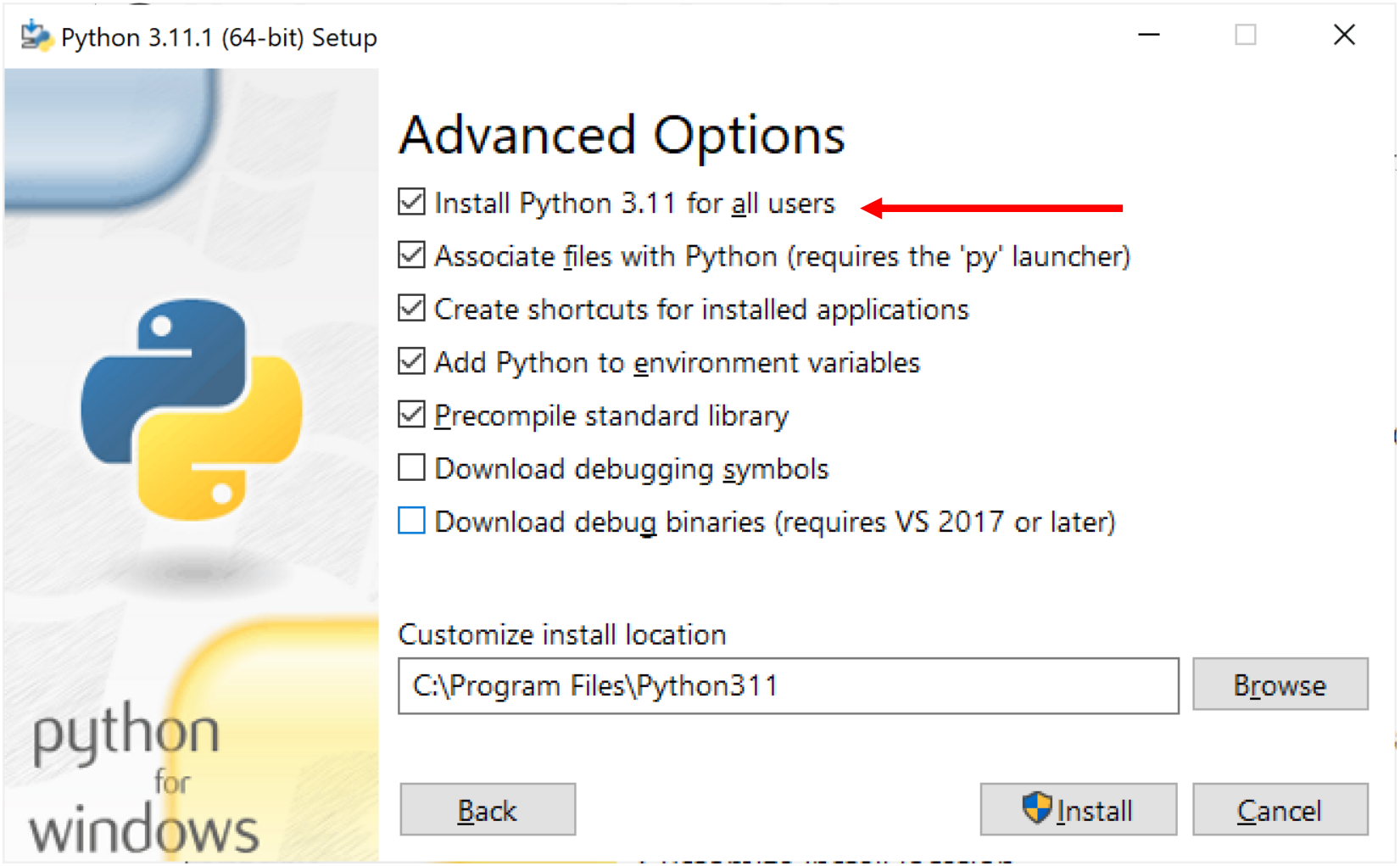
- Programming Language: Python
- Imaging Library: OpenCV (Open Source Computer Vision Library)

Step 1: Install Python

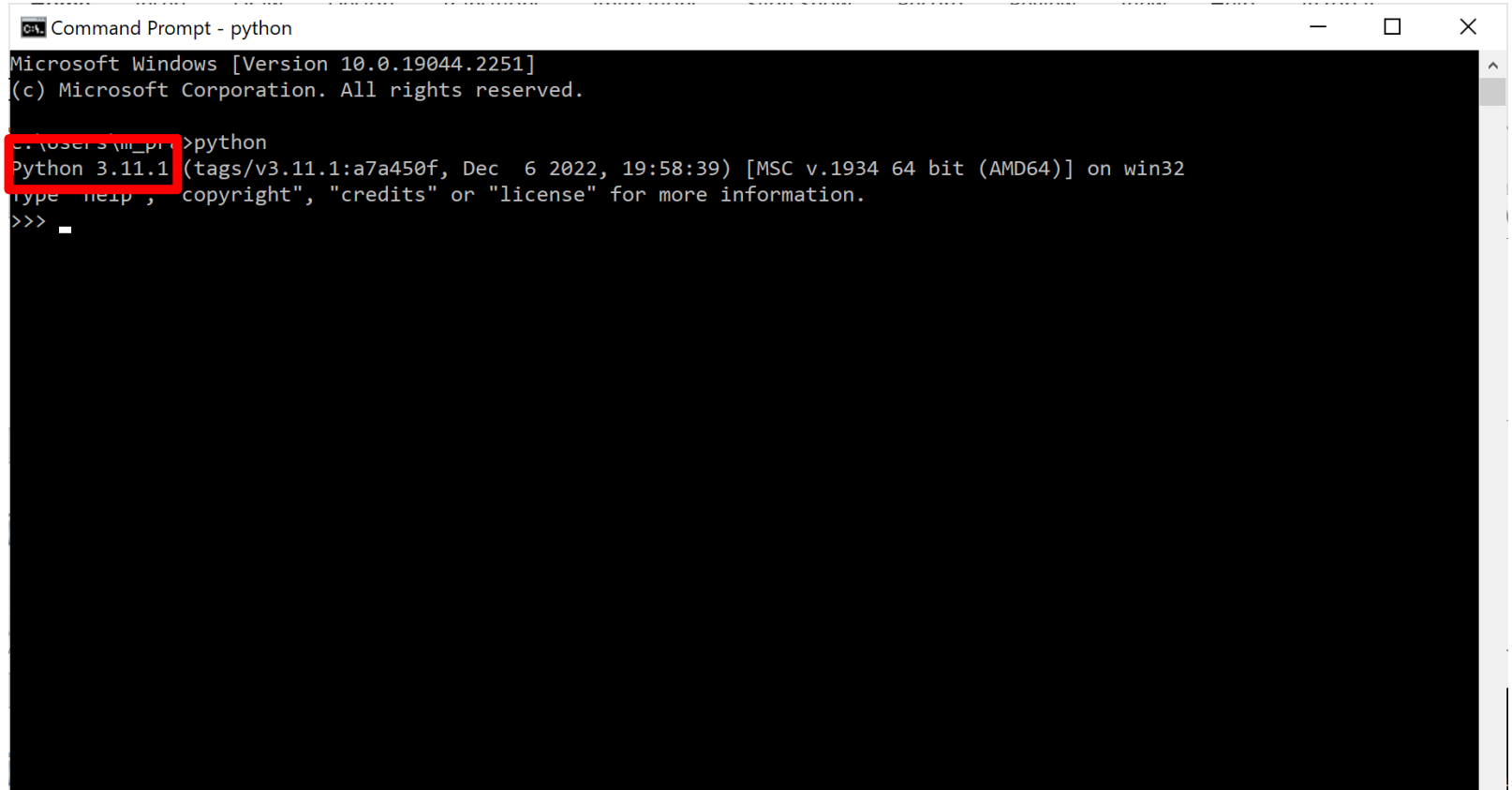
https://www.python.org/downloads/


Python 3.11.1 (64-bit) Setup
Install Python 3.11.1 (64-bit)
Select Install Now to install Python with default settings, or choose
Customize to enable or disable features.
Install Now
C:\Users\m_pra\AppData\Local\Programs\Python\Python311
Includes IDLE, pip and documentation
Creates shortcuts and file associations
Customize installation
Choose location and features
python
for
windows
Use admin privileges when installing py.exe
Add python.exe to PATH
Cancel


Python 3.11.1 (64-bit) Setup
Optional Features
Documentation
Installs the Python documentation files.
pip
Installs pip, which can download and install other Python packages.
tcl/tk and IDLE
Installs tkinter and the IDLE development environment.
Python test suite
Installs the standard library test suite.
py launcher
for all users (requires admin privileges)
Upgrades the global 'py' launcher from the previous version.
python
for
windows
Back
Next
Cancel


Python 3.11.1 (64-bit) Setup
Advanced Options
Install Python 3.11 for all users
Associate files with Python (requires the 'py' launcher)
Create shortcuts for installed applications
Add Python to environment variables
Precompile standard library
Download debugging symbols
Download debug binaries (requires VS 2017 or later)
Customize install location
C:\Program Files\Python311
Browse
Back
Install
Cancel
python
for
windows

Open Command Prompt
>python

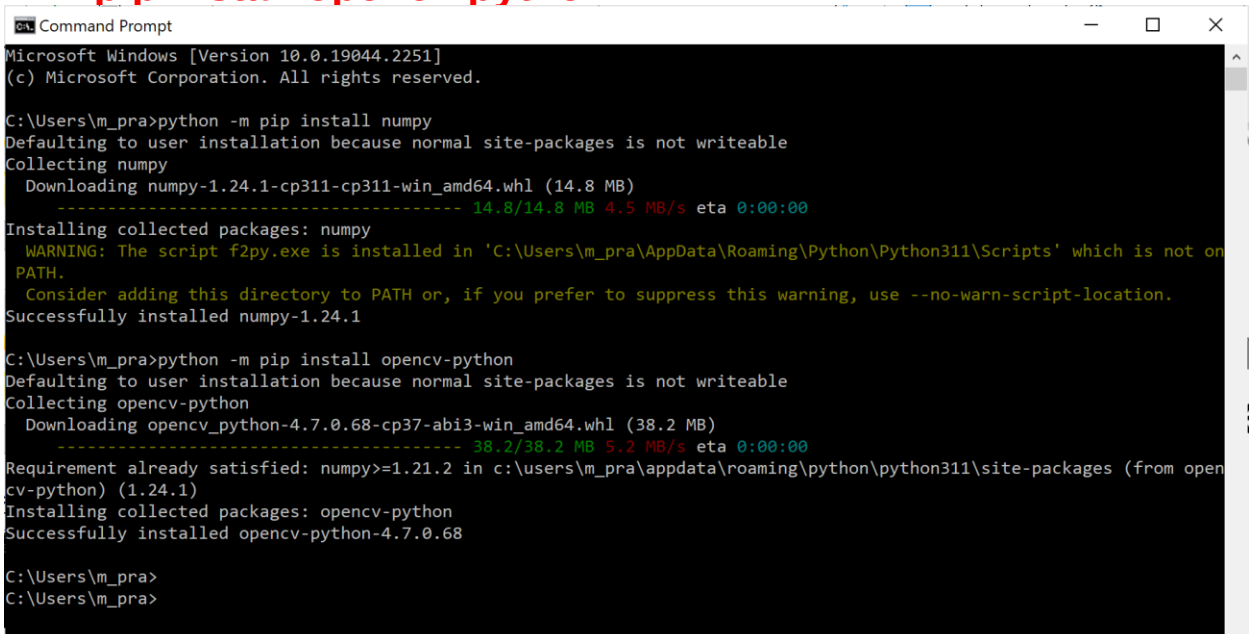


Step2: Install OpenCV

1. Open command prompt (Run as administrator, if permission error)
2. Install numpy

   >**python -m pip install numpy**
3. Install OpenCV

   >**python -m pip install opencv-python**

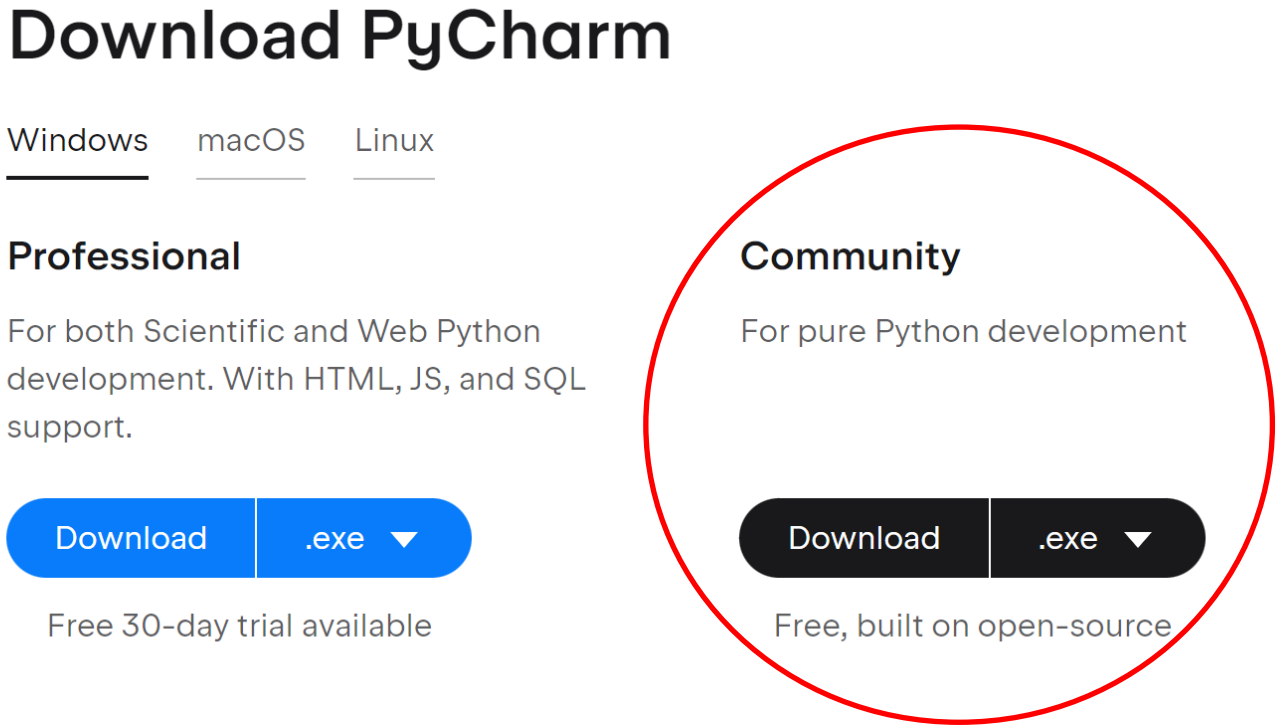


Step 4: Install Python IDE

- Numerous options.
  - Atom
  - Geany
  - PyDev(Eclipse)
  - PyCharm

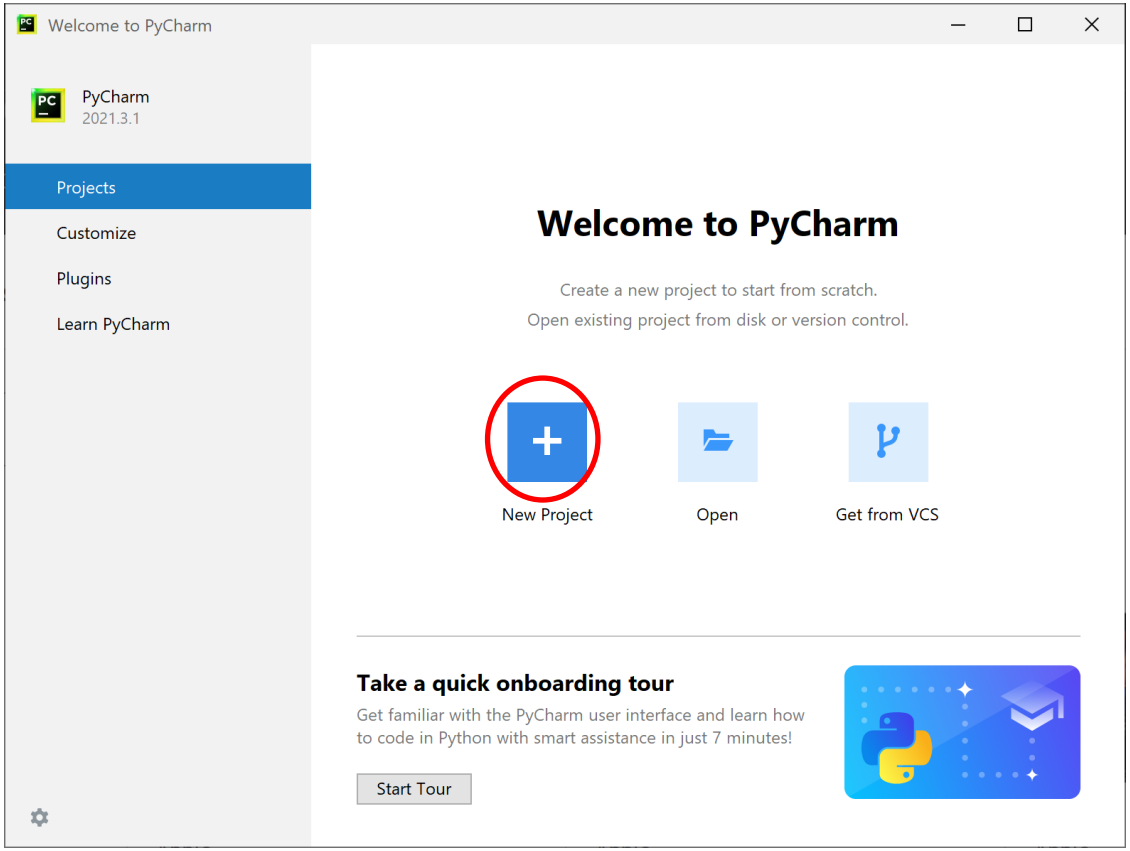
Step 4: Install PyCharm

- https://www.jetbrains.com/pycharm/download/#section=windows
- Install Community version (Free to use)



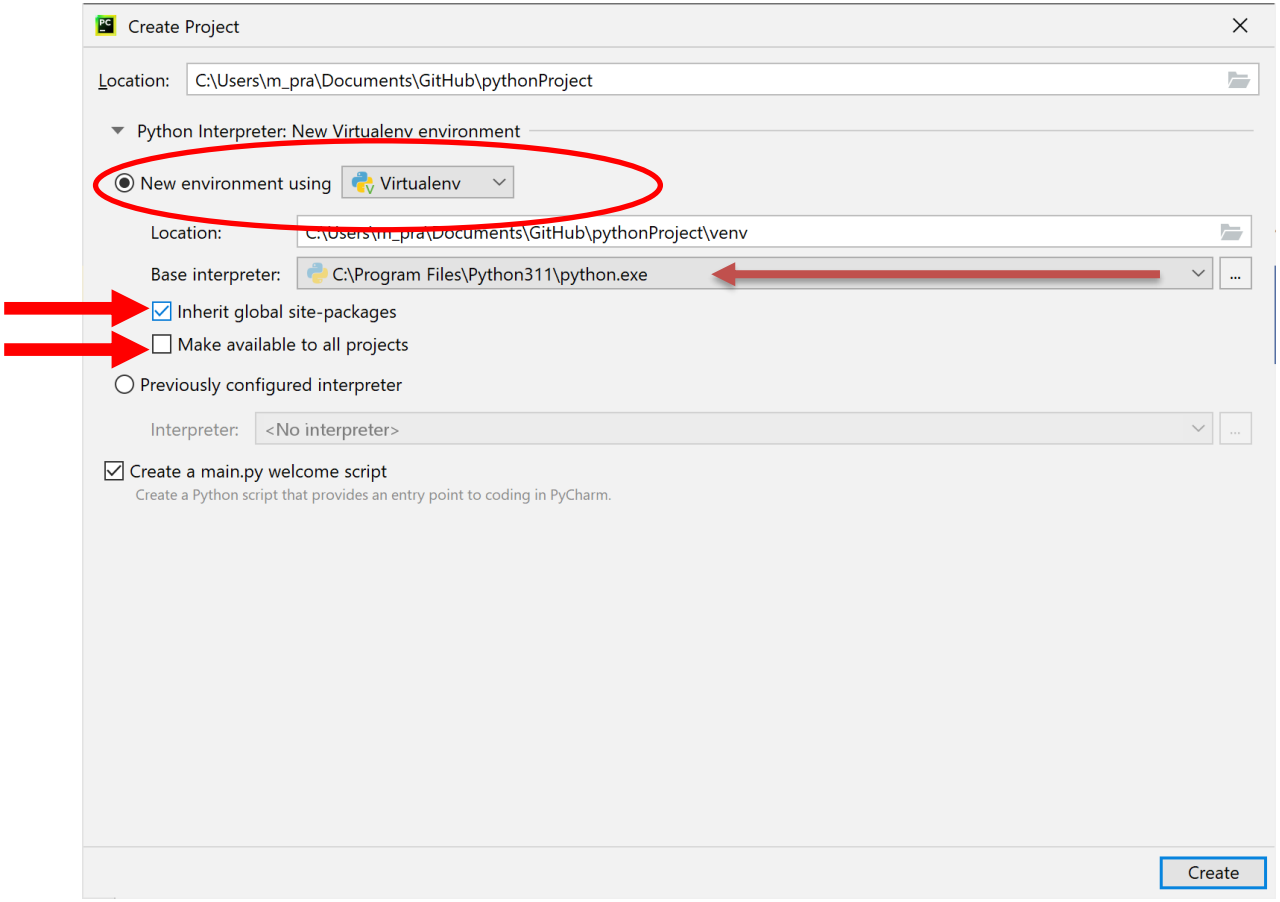
Step 5: Setup PyCharm and OpenCV

- Start PyCharm
- Create New Project



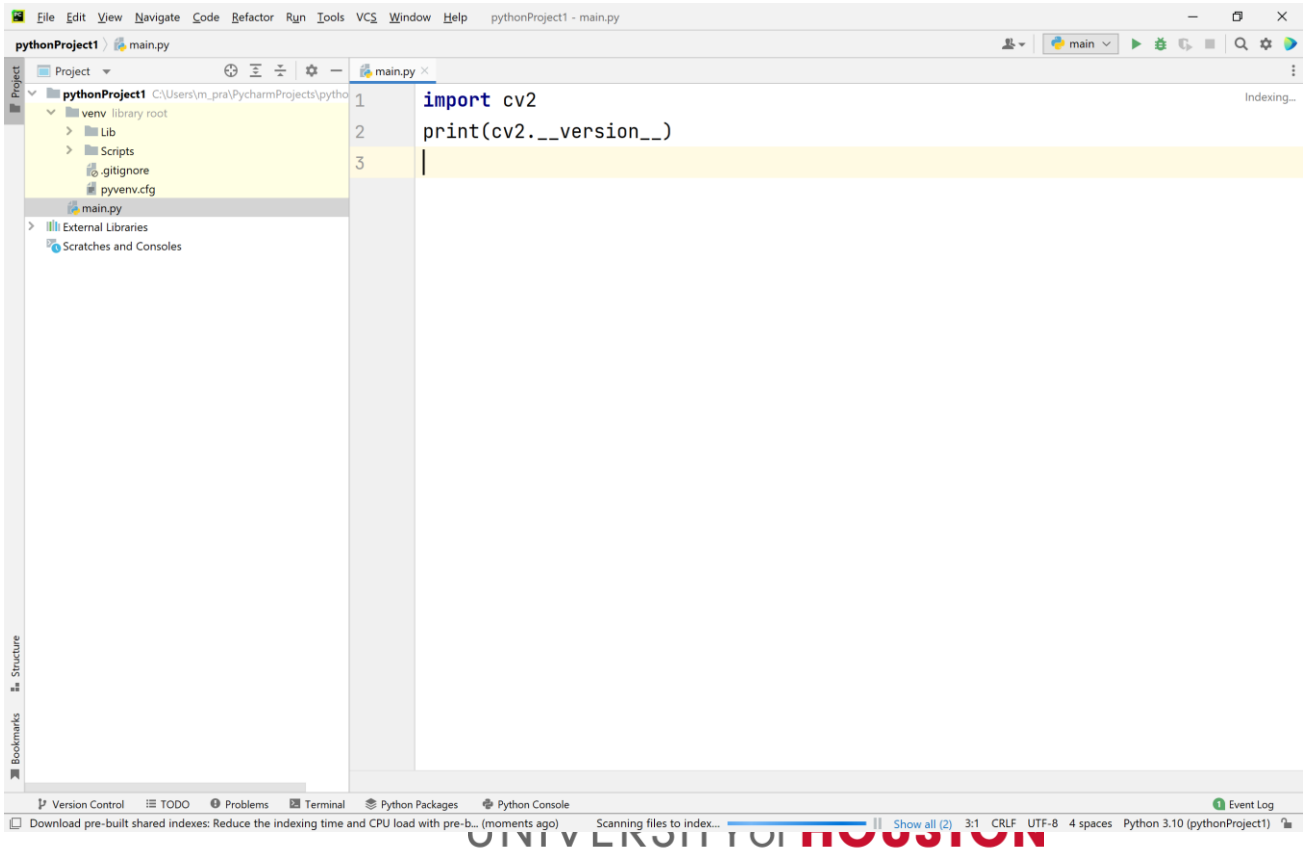
Step 5: Setup PyCharm and OpenCV

- Select Interpreter:



Step 5: Setup PyCharm and OpenCV

- Click on the project and open main.py python file.
- Note PyCharm may take some to index files (will appear in the lower right corner in IDE). Let it run through.

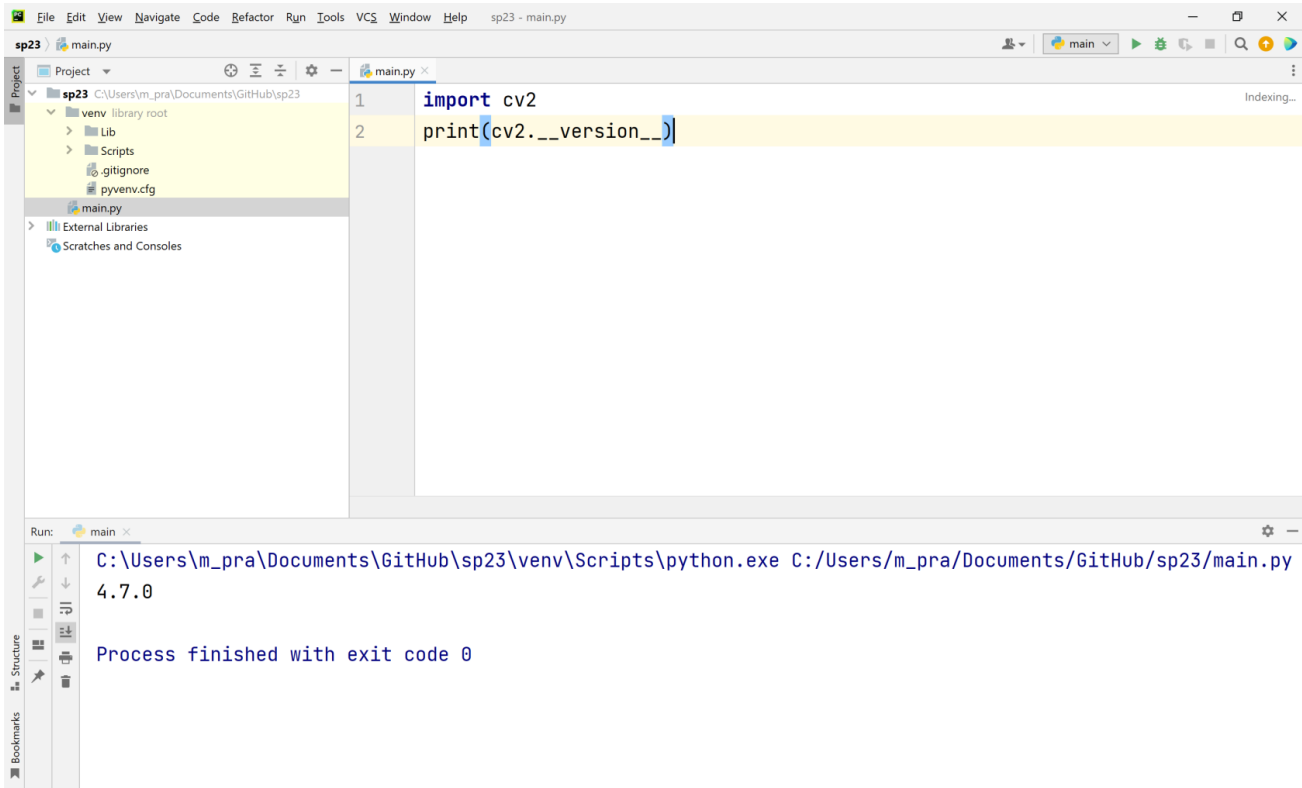


Step 5: Setup PyCharm and OpenCV

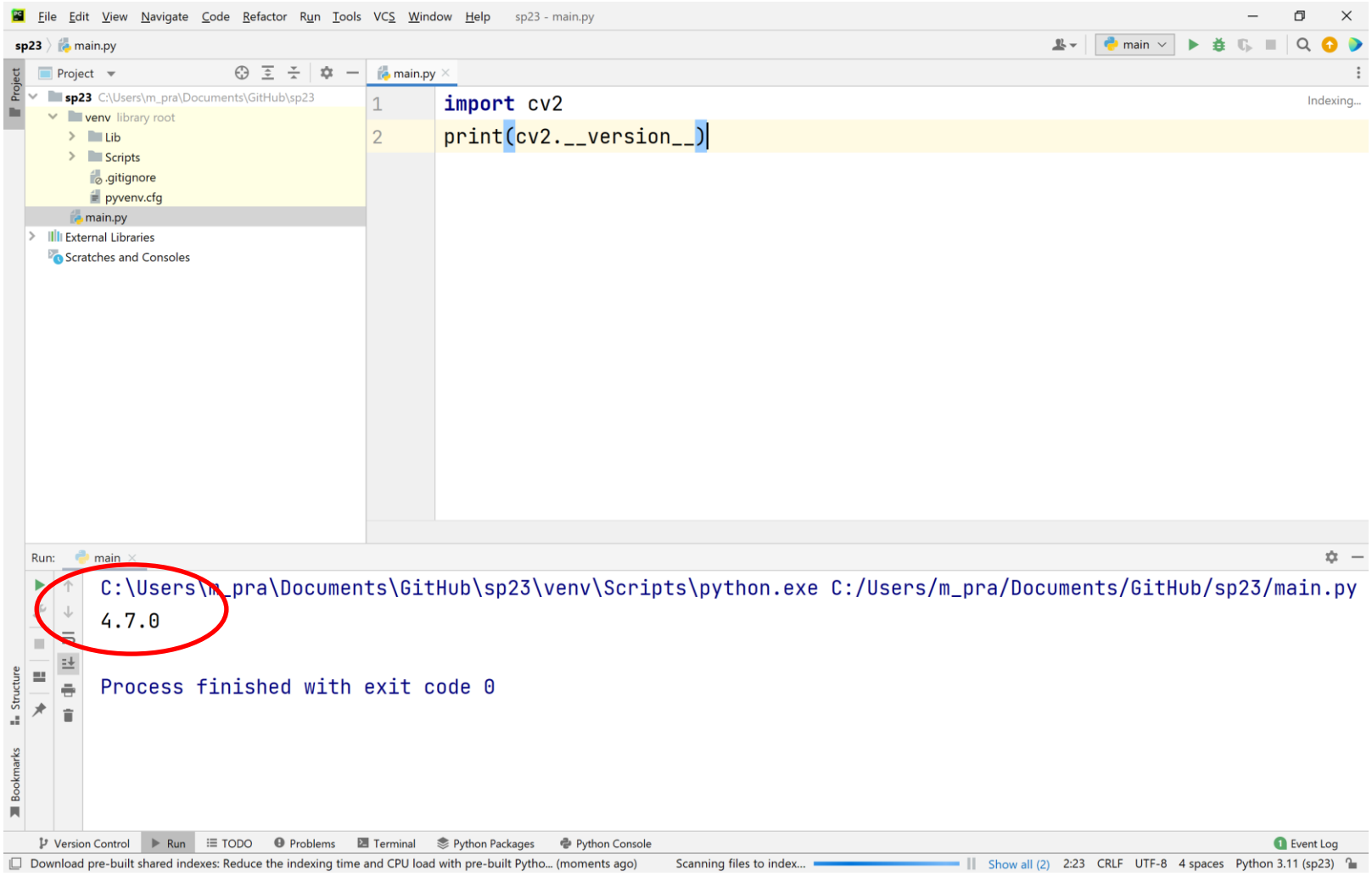
- Type in the code

```
import cv2
print(cv2.__version__)
```

- Go to run> Run



Step 5: Setup PyCharm and OpenCV



Troubleshooting

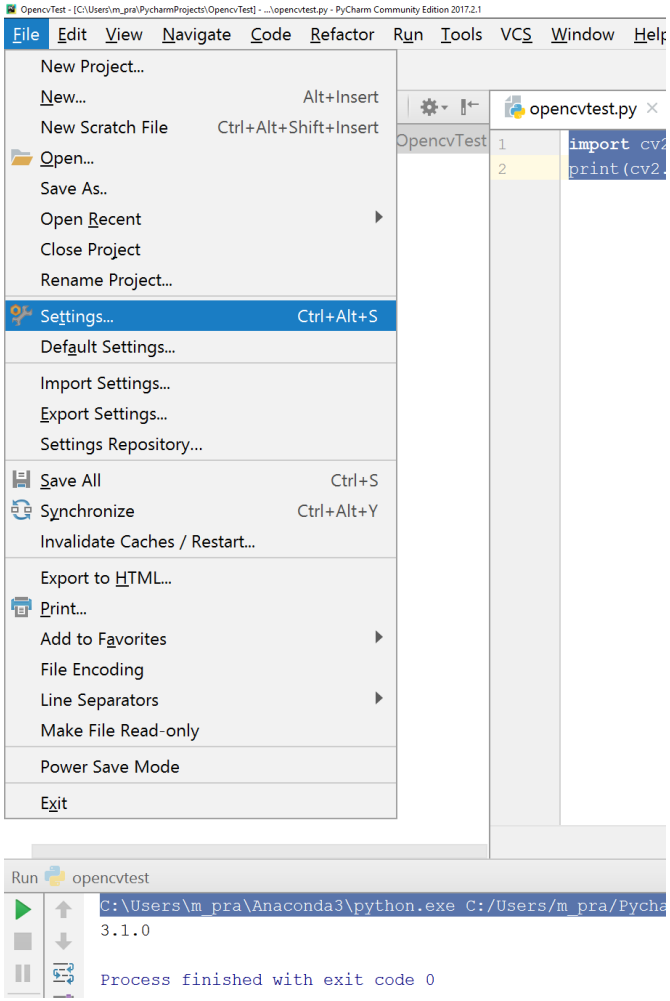
- If you get an error like

Traceback (most recent call last):
File "<stdin>", line 1, in <module>
ImportError: No module named ‘cv2‘

- Pycharm has failed to load Opencv

Troubleshooting

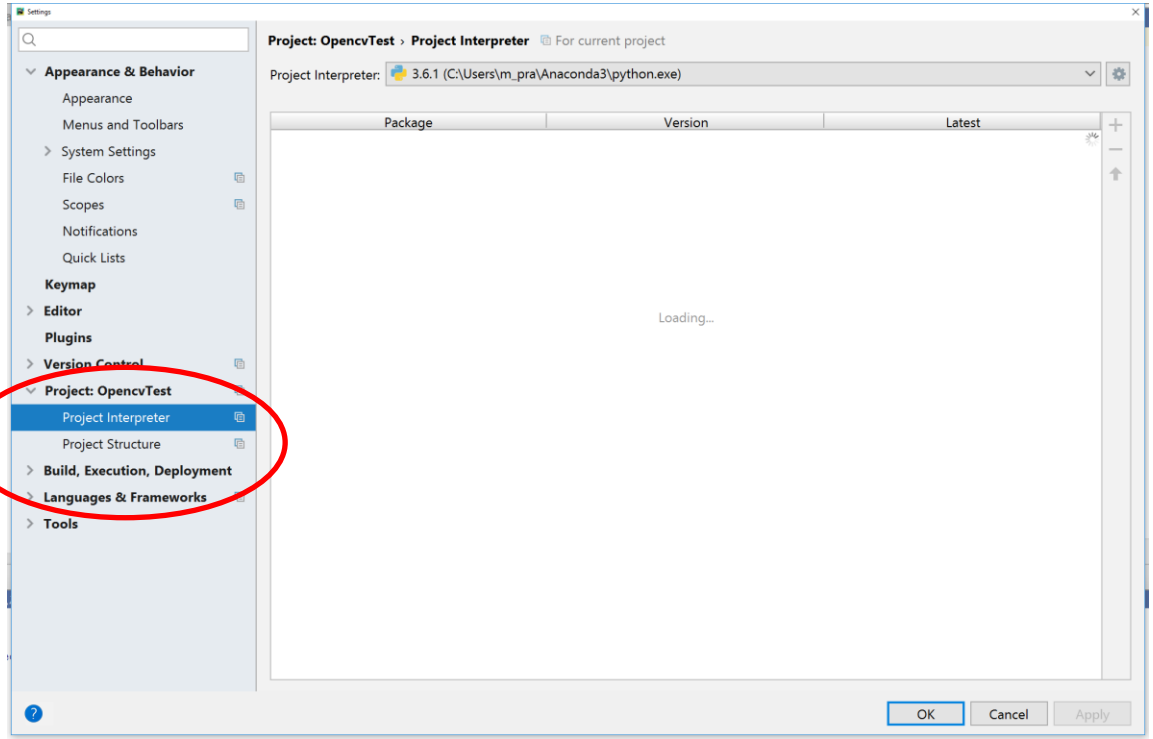
- Go to File > Settings



Troubleshooting

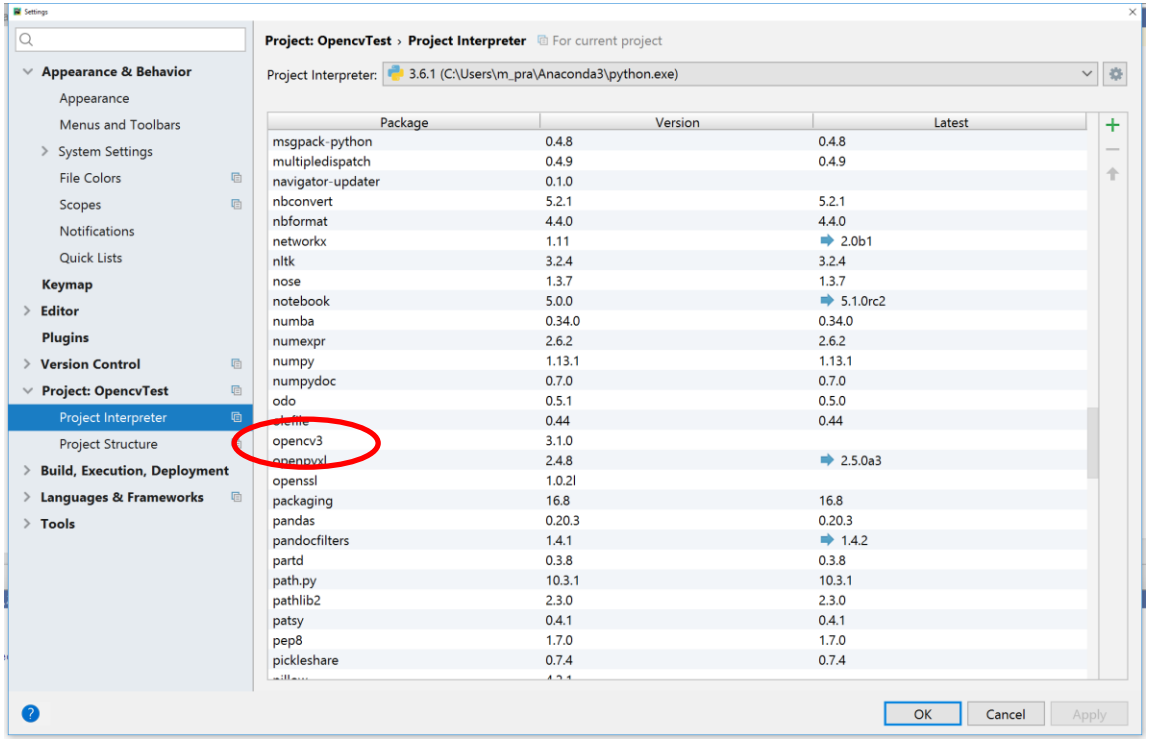
- Go to

Project : <your project name > project interpreter



Troubleshooting

- Choose package (double click) opencv3 →install package



Try running your file again