

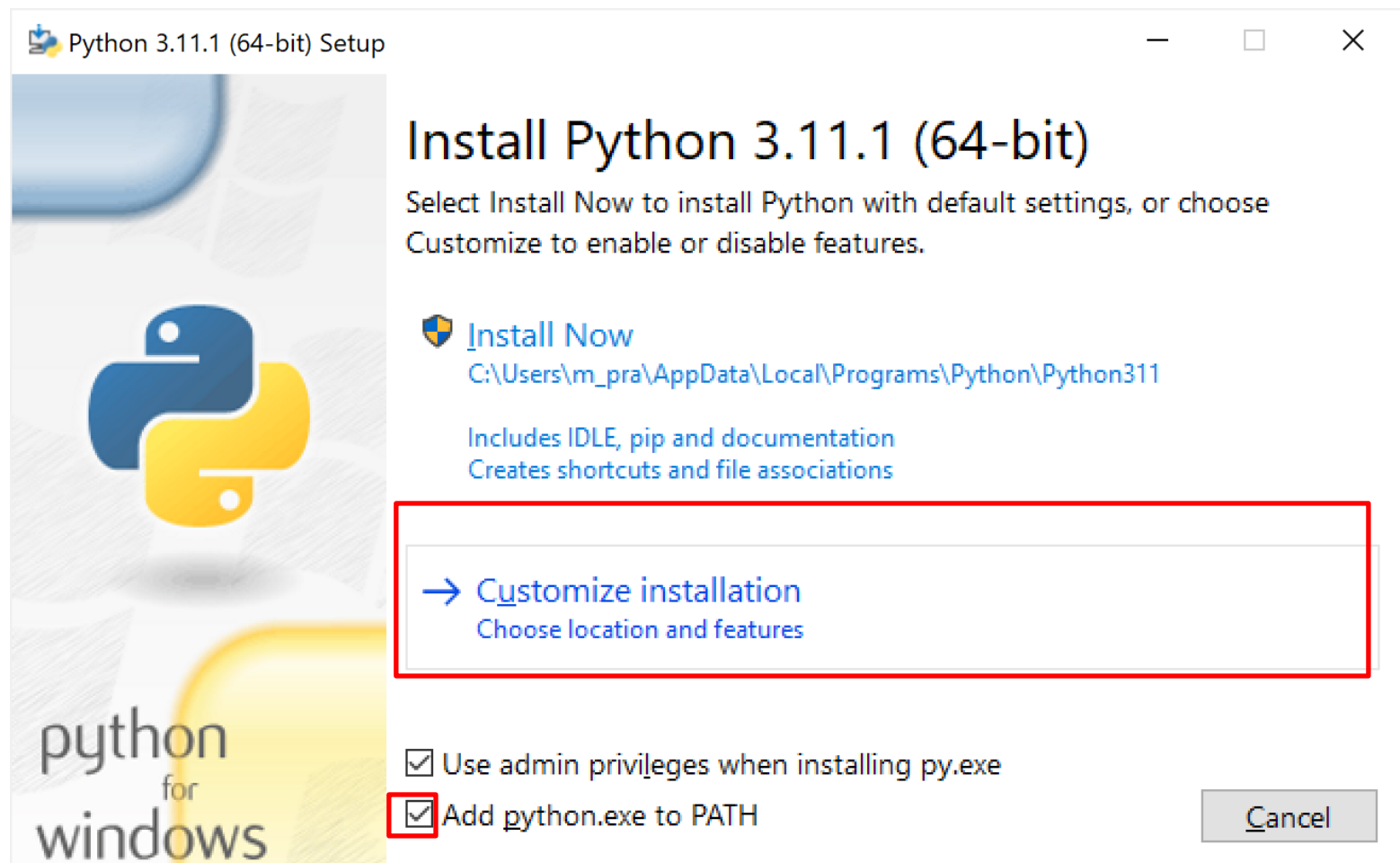
Required Installation

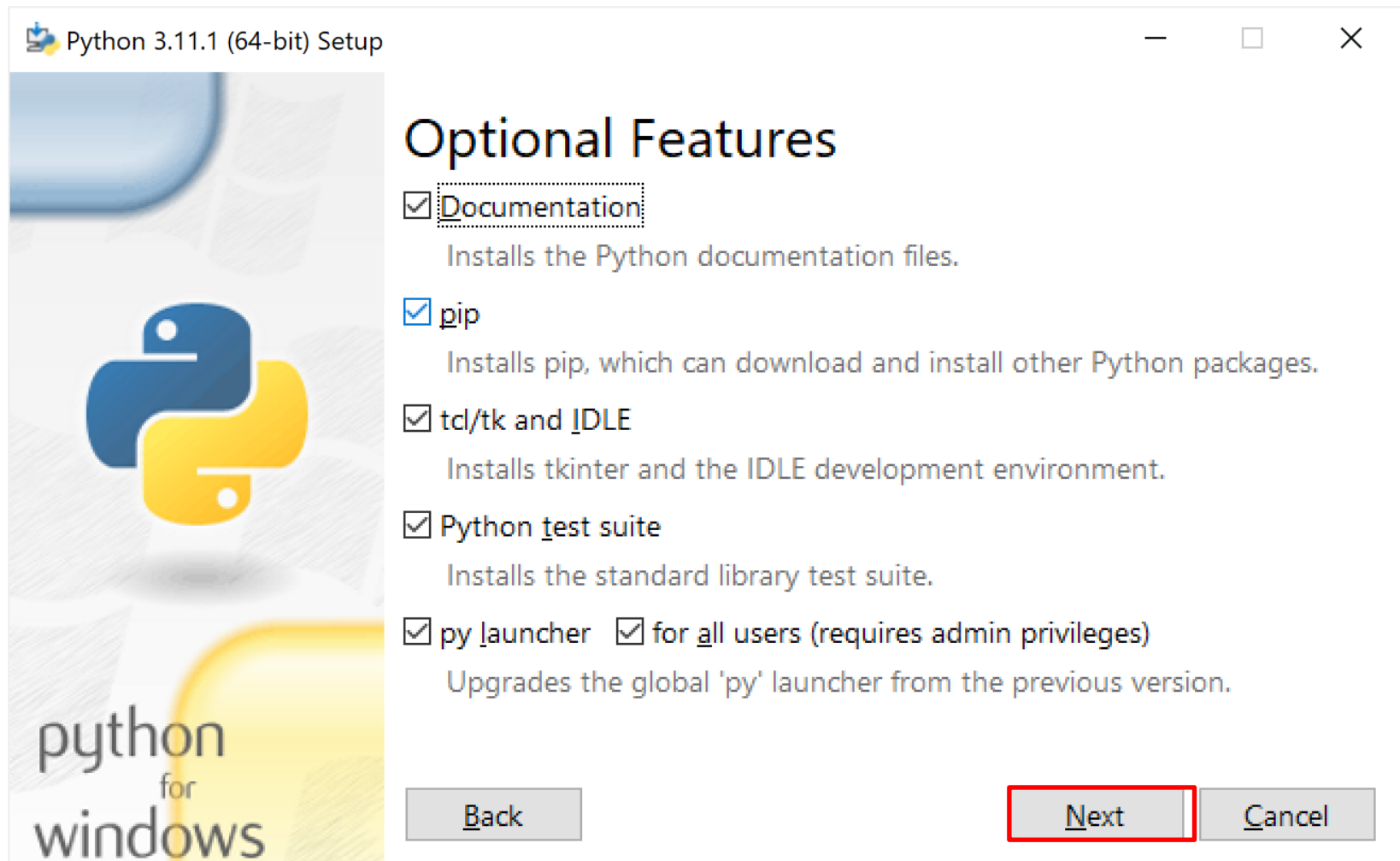
- Programming Language: Python
- Imaging Library: OpenCV (Open Source Computer Vision Library)

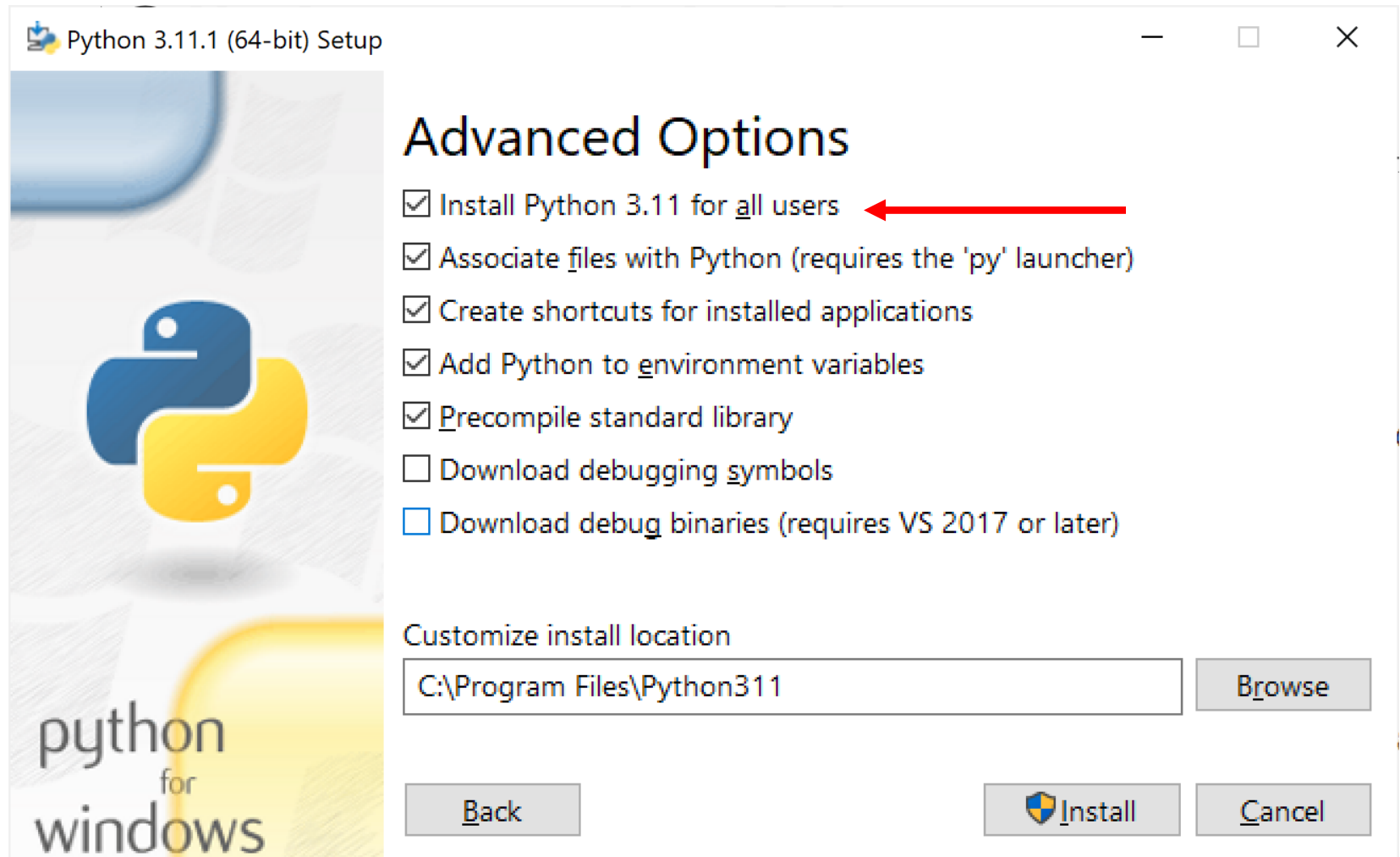
Step 1: Install Python

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



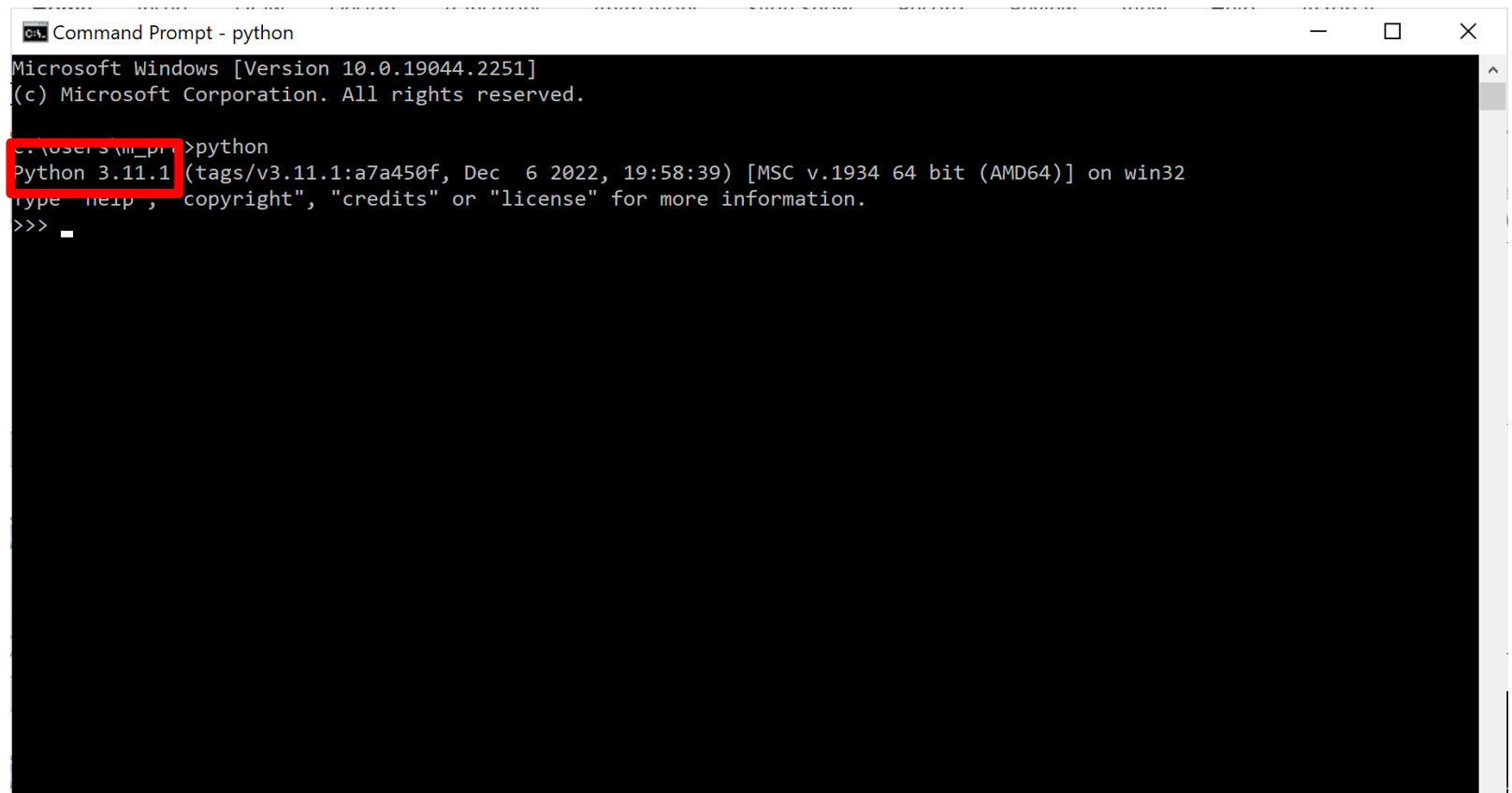






Open Command Prompt

>python



```
Command Prompt - python
Microsoft Windows [Version 10.0.19044.2251]
(c) Microsoft Corporation. All rights reserved.

C:\Users\m_pr>python
Python 3.11.1 (tags/v3.11.1:a7a450f, Dec 6 2022, 19:58:39) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> _
```

Step2: Install OpenCV

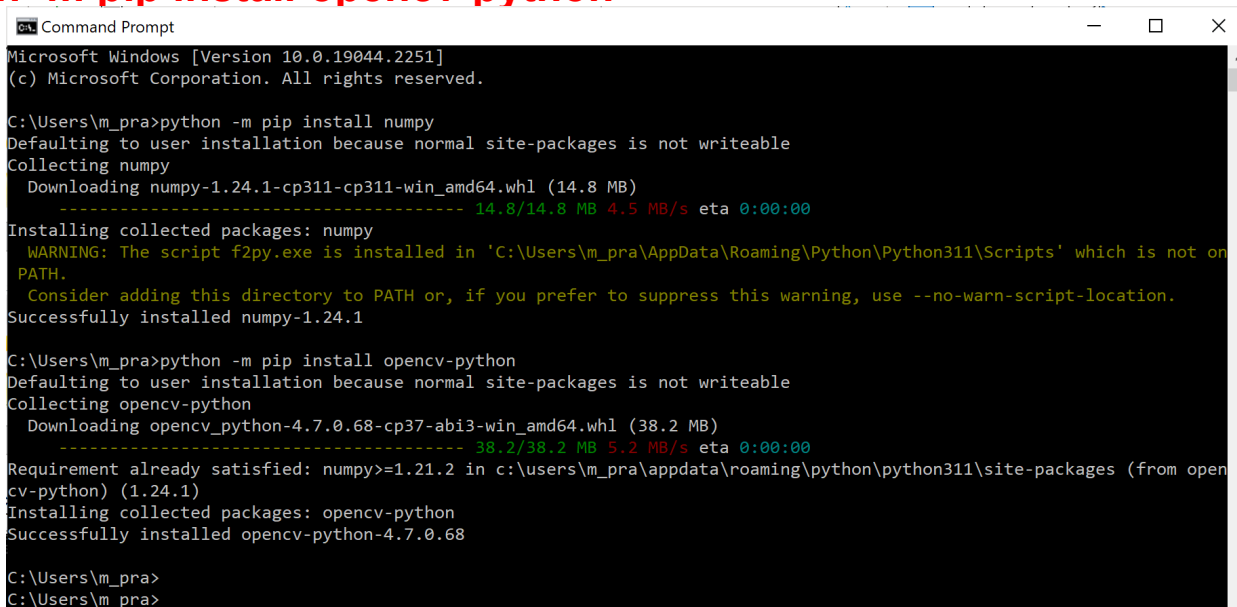
1. Open command prompt (Run as administrator, if permission error)

2. Install numpy

> **python -m pip install numpy**

3. Install OpenCV

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



```
Command Prompt
Microsoft Windows [Version 10.0.19044.2251]
(c) Microsoft Corporation. All rights reserved.

C:\Users\m_pra>python -m pip install numpy
Defaulting to user installation because normal site-packages is not writeable
Collecting numpy
  Downloading numpy-1.24.1-cp311-cp311-win_amd64.whl (14.8 MB)
    ----- 14.8/14.8 MB 4.5 MB/s eta 0:00:00
Installing collected packages: numpy
  WARNING: The script f2py.exe is installed in 'C:\Users\m_pra\AppData\Roaming\Python\Python311\Scripts' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed numpy-1.24.1

C:\Users\m_pra>python -m pip install opencv-python
Defaulting to user installation because normal site-packages is not writeable
Collecting opencv-python
  Downloading opencv_python-4.7.0.68-cp37-abi3-win_amd64.whl (38.2 MB)
    ----- 38.2/38.2 MB 5.2 MB/s eta 0:00:00
Requirement already satisfied: numpy>=1.21.2 in c:\users\m_pra\appdata\roaming\python\python311\site-packages (from opencv-python) (1.24.1)
Installing collected packages: opencv-python
Successfully installed opencv-python-4.7.0.68

C:\Users\m_pra>
C:\Users\m_pra>
```

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)

Download PyCharm

Windows macOS Linux

Professional

For both Scientific and Web Python development. With HTML, JS, and SQL support.

Download

.exe ▼

Free 30-day trial available

Community

For pure Python development

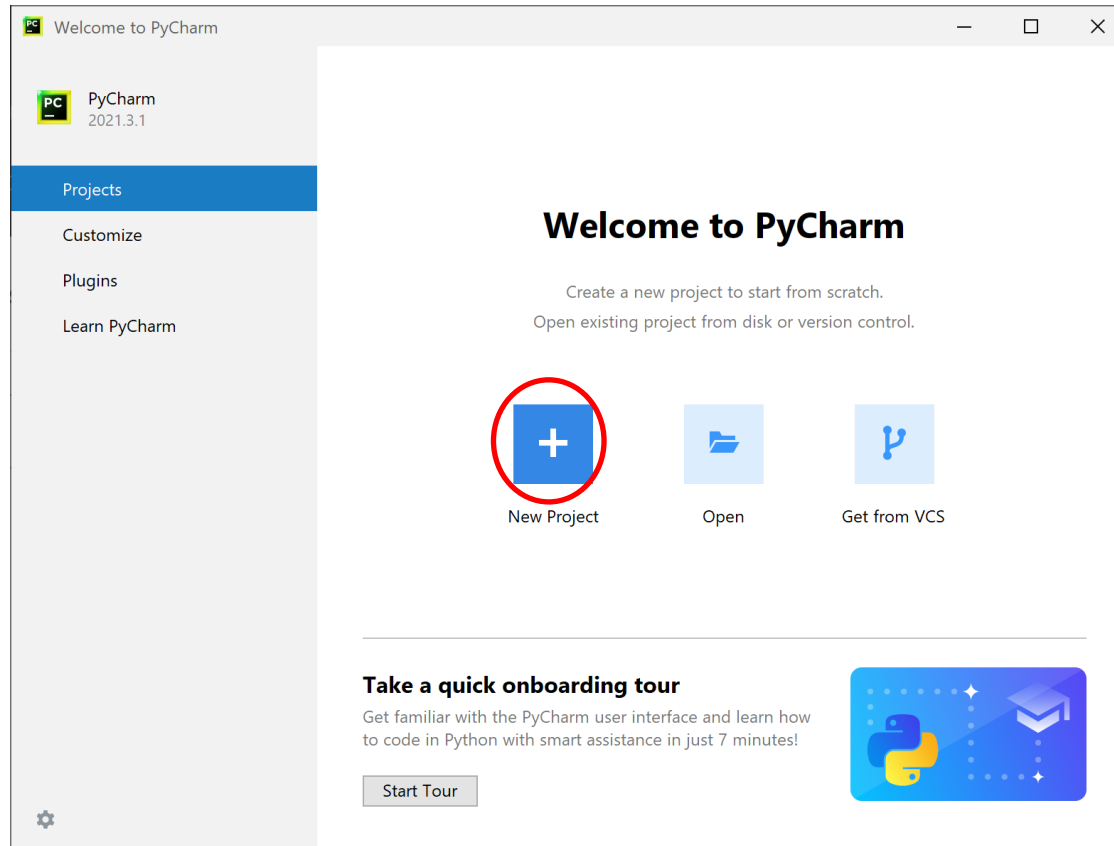
Download

.exe ▼

Free, built on open-source

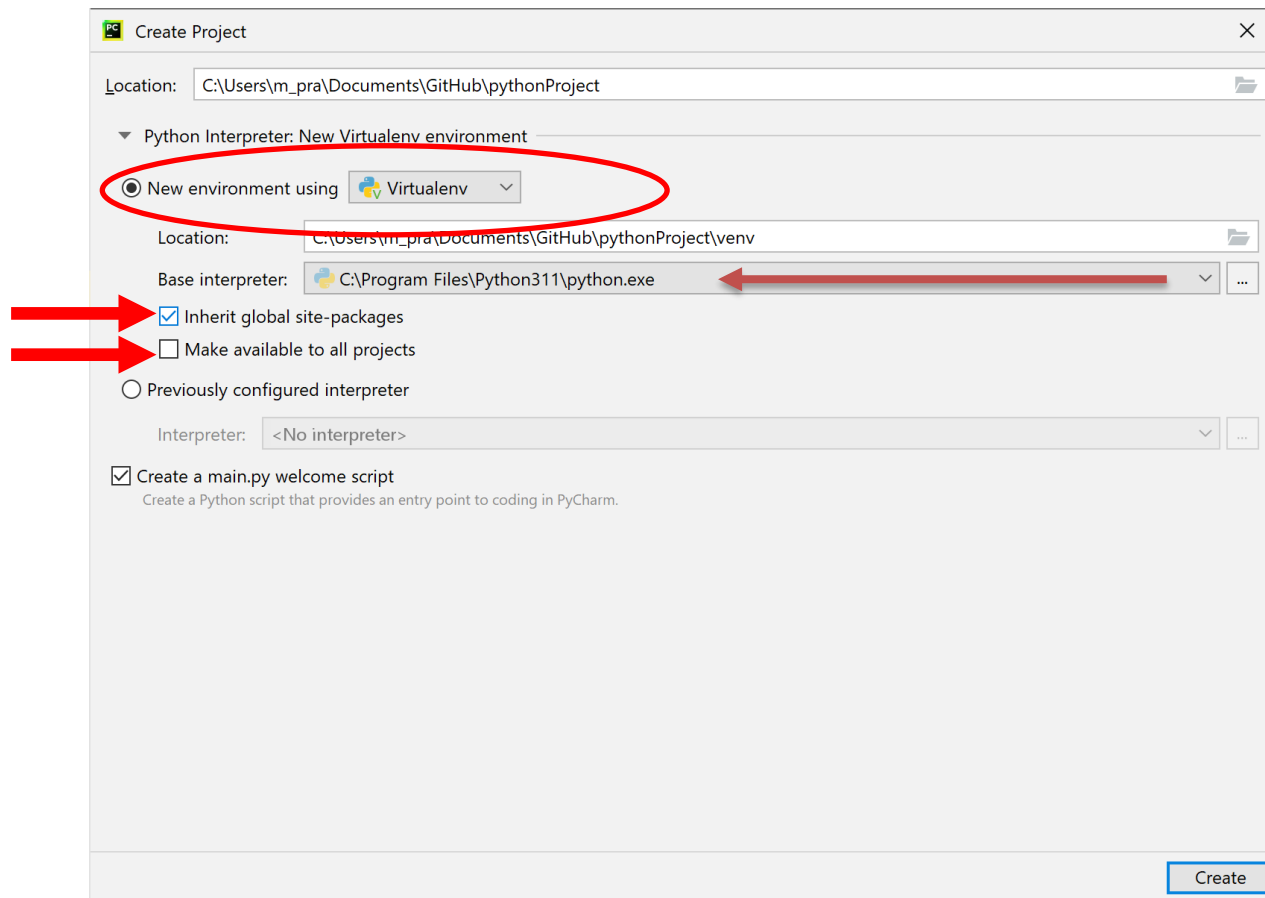
Step 5: Setup PyCharm and OpenCV

- Start PyCharm
- Create New Project



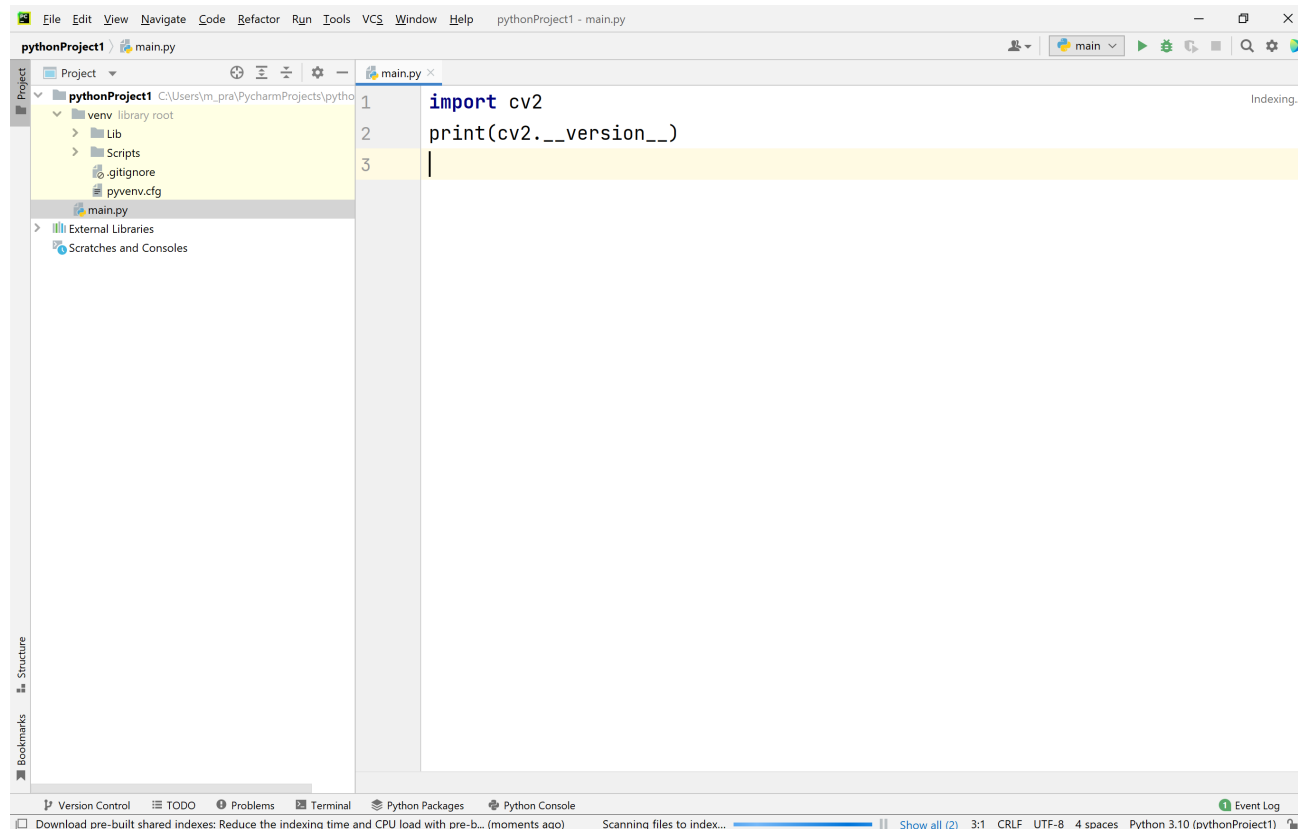
Step 5: Setup PyCharm and OpenCV

- 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.

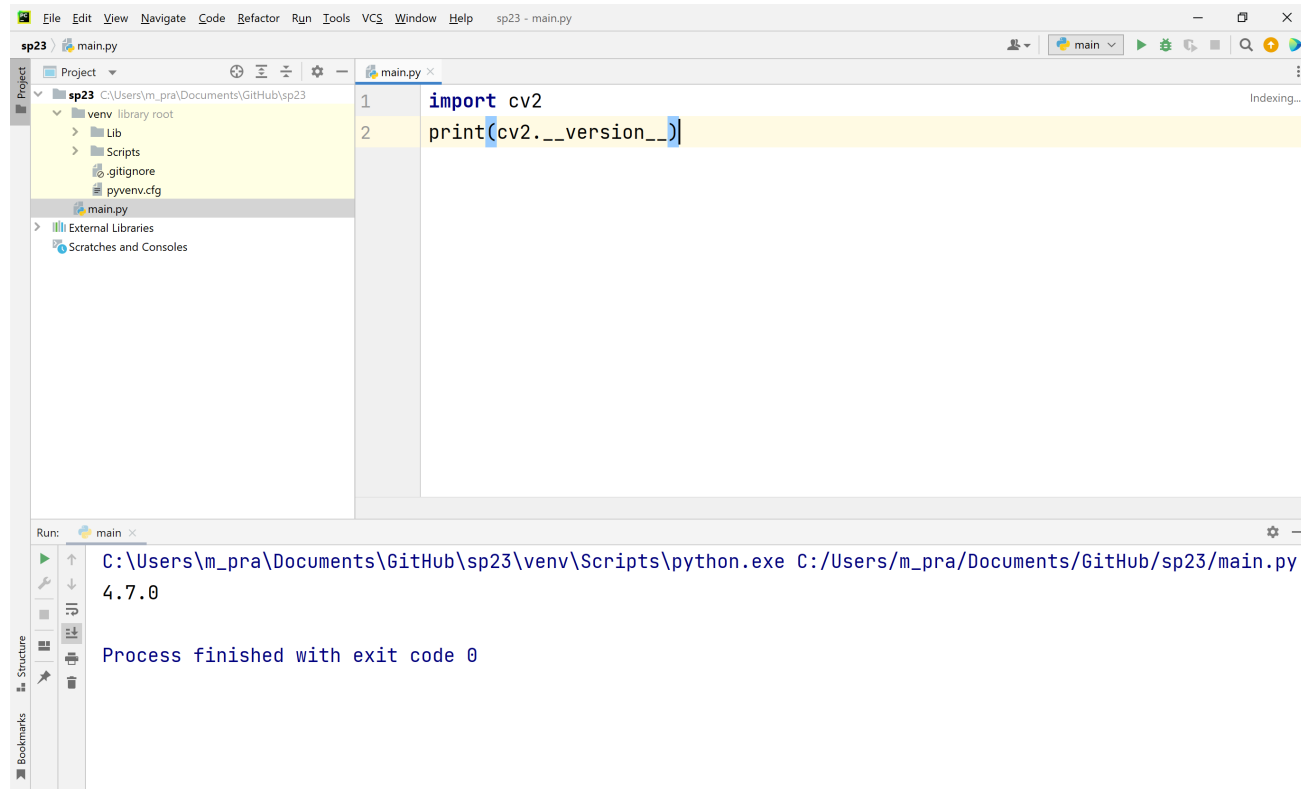


Step 5: Setup PyCharm and OpenCV

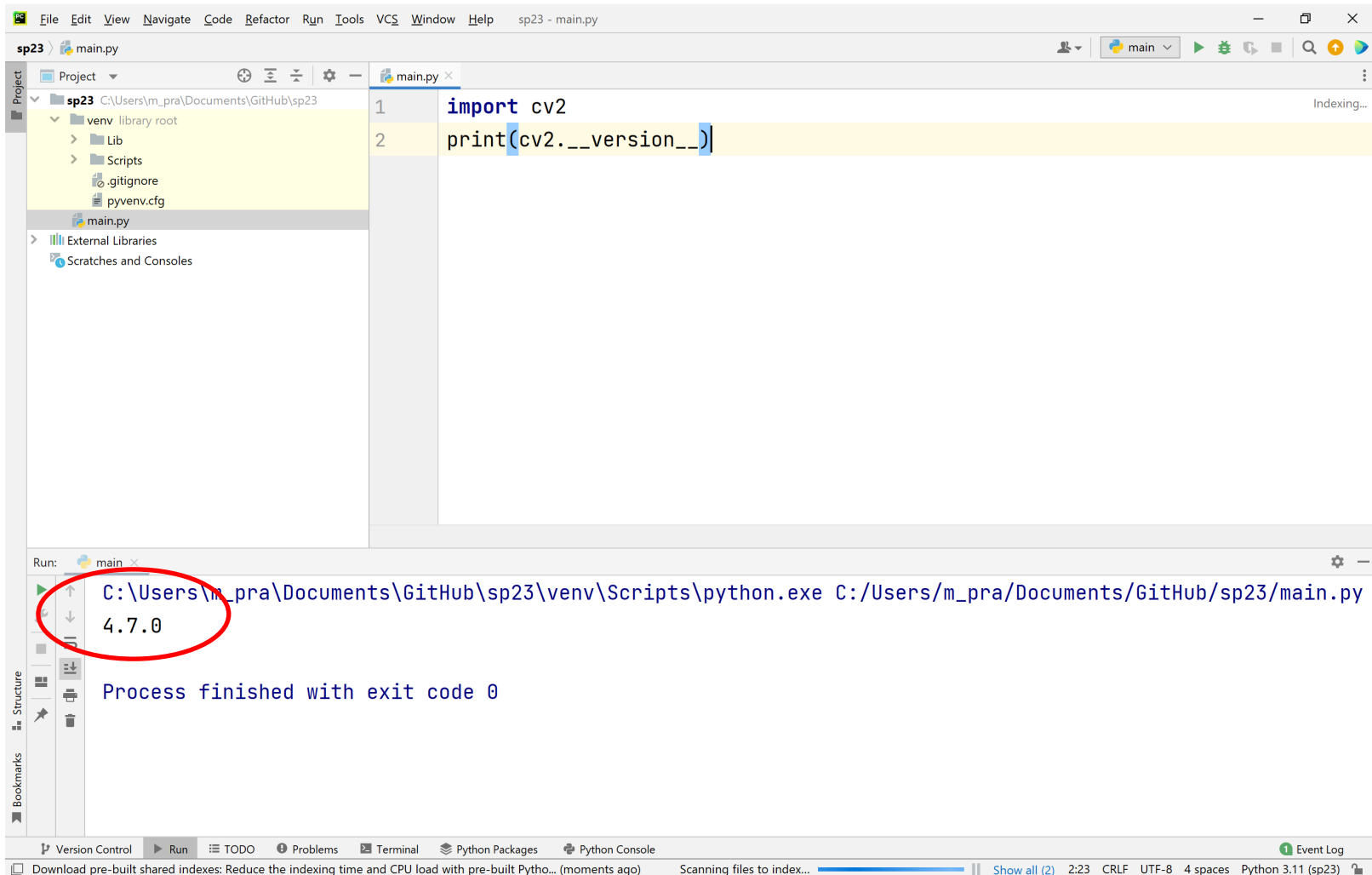
- Type in the code

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

- Go to run> Run



Step 5: Setup PyCharm and OpenCV

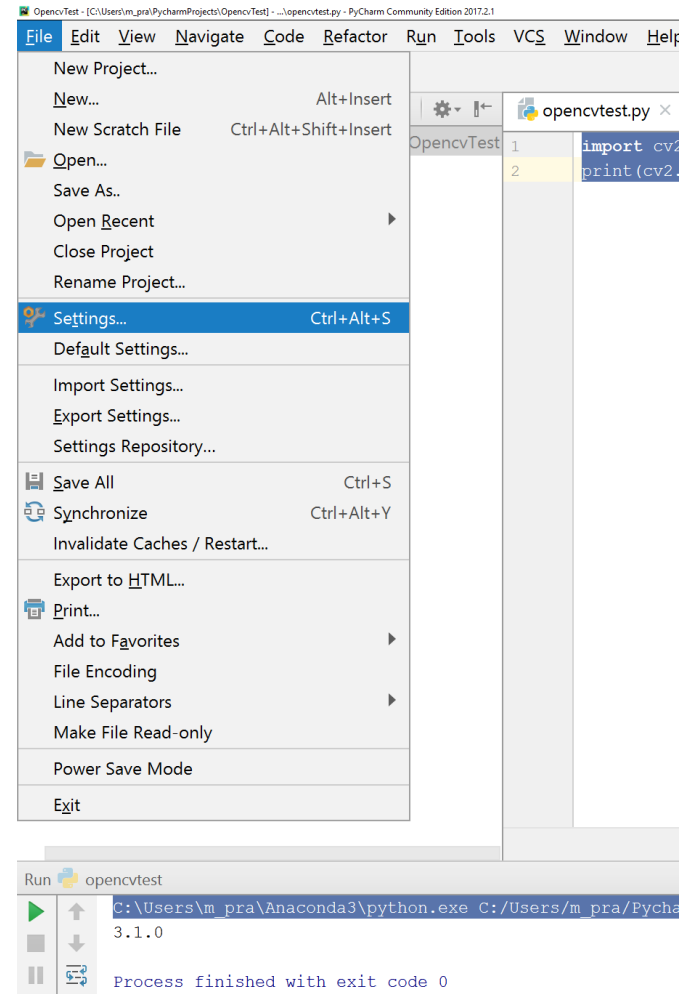


Troubleshooting

- 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

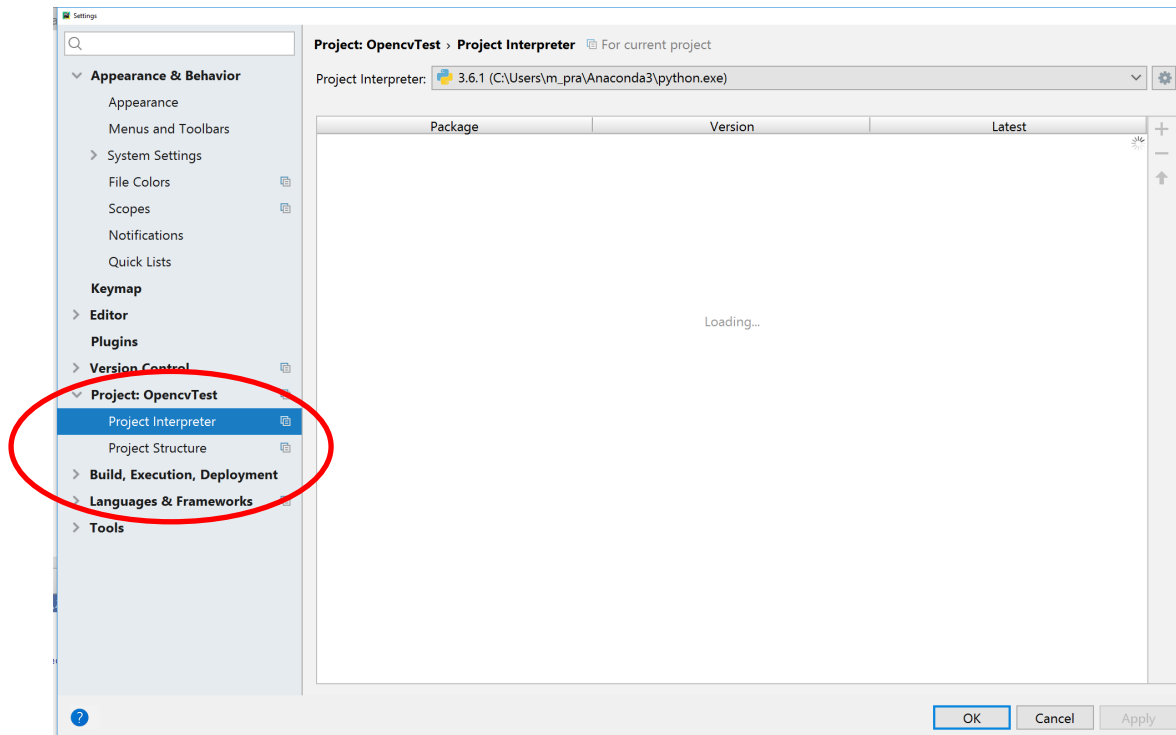
Troubleshooting

- Go to File > Settings



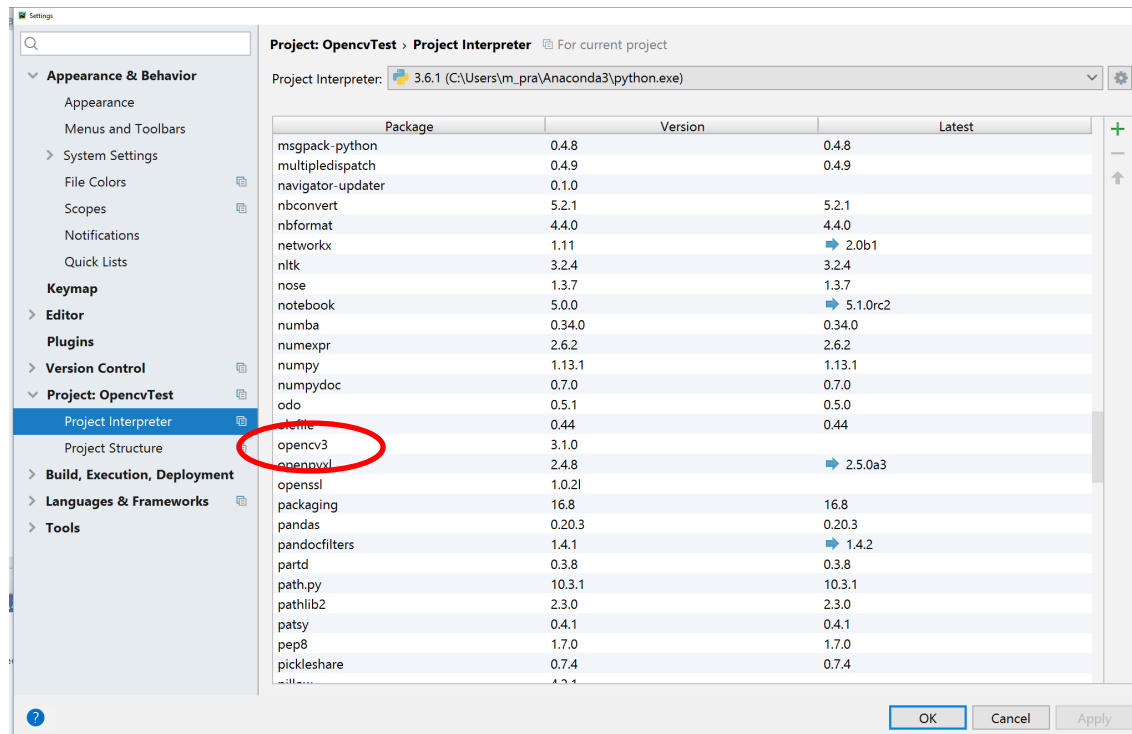
Troubleshooting

- Go to
Project : <your project name > project interpreter



Troubleshooting

- Choose package (double click) opencv3
→ install package



Try running your file
again