Check Monitor Python Script
User Guide

December 20, 2024

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Revision history

Revision	Date	Description
A	December 2024	Initial release

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Contents

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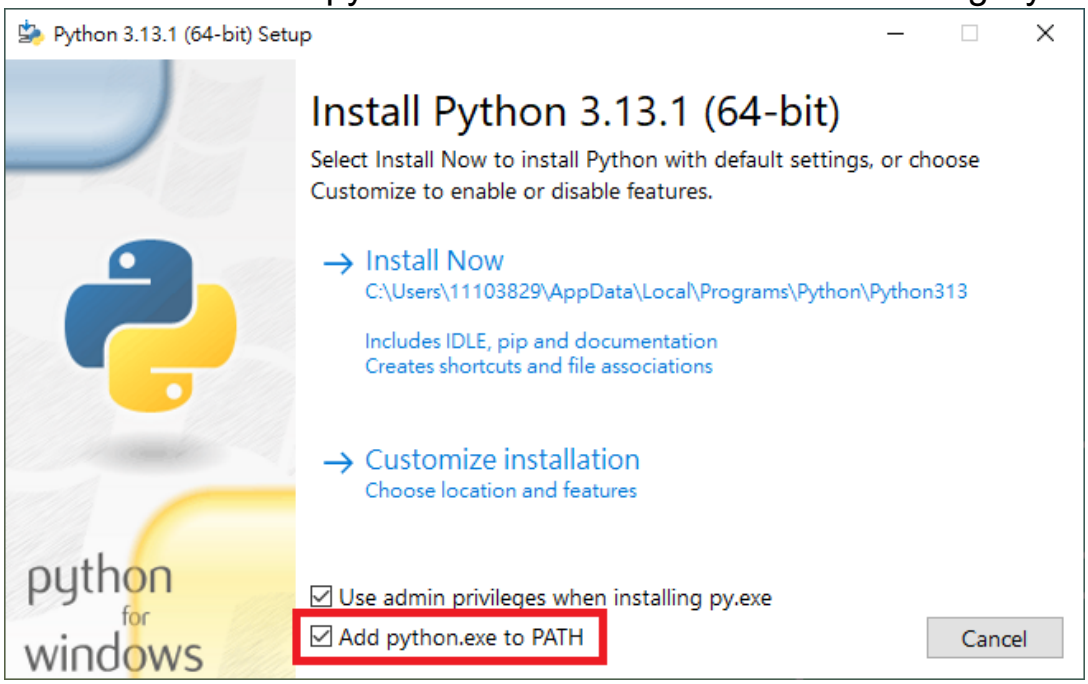
1. Build Environment

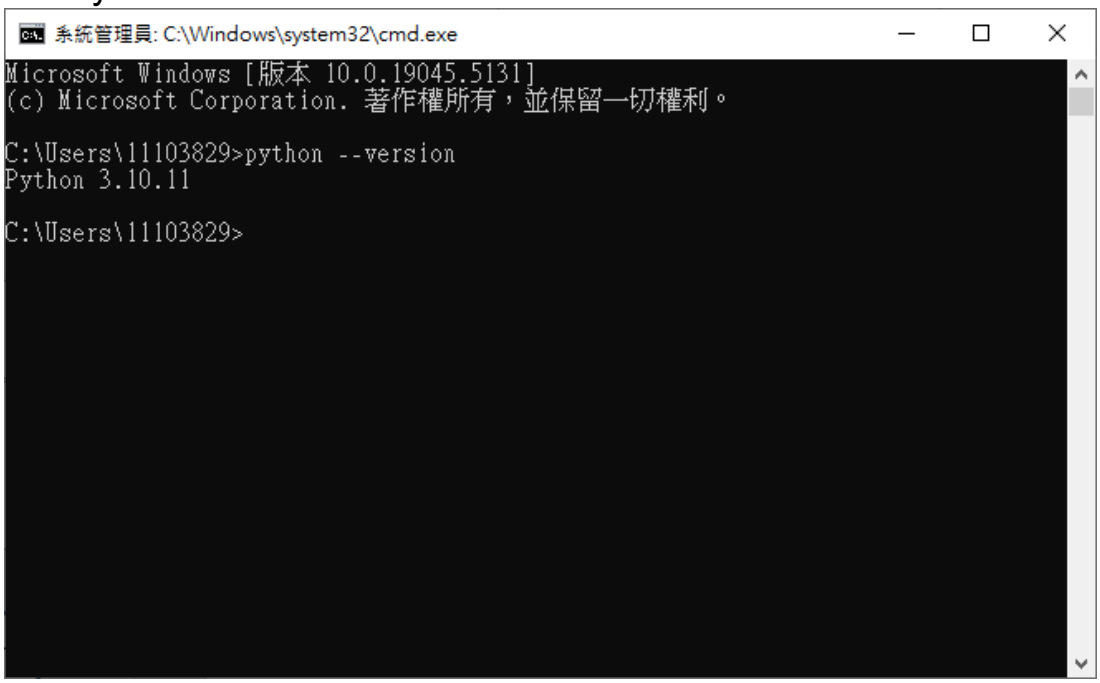
1.1 Install Python

Please download Python from official Python website and install it on your PC.
Download Link: https://www.python.org/downloads/

Please check “Add python.exe to PATH” box while installing Python.



After installation, you can check whether Python is been installed properly by opening PowerShell or cmd and input “**`python --version`**”. You should get the Python version.



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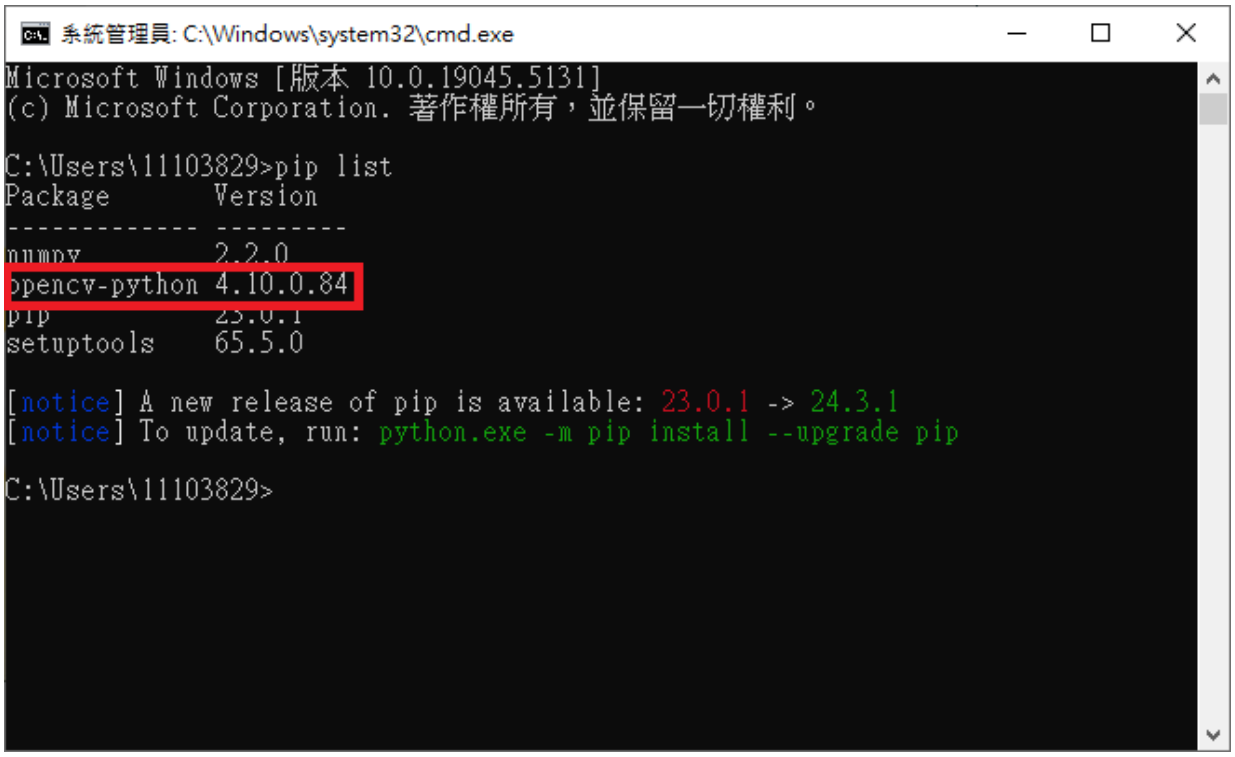
1.2 Install OpenCV

Open PowerShell or cmd and input “**`pip install opencv-python`**” and it will start to download and install OpenCV automatically.
After installation, you can find the installed OpenCV version via “**`pip list`**”



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2. Usage

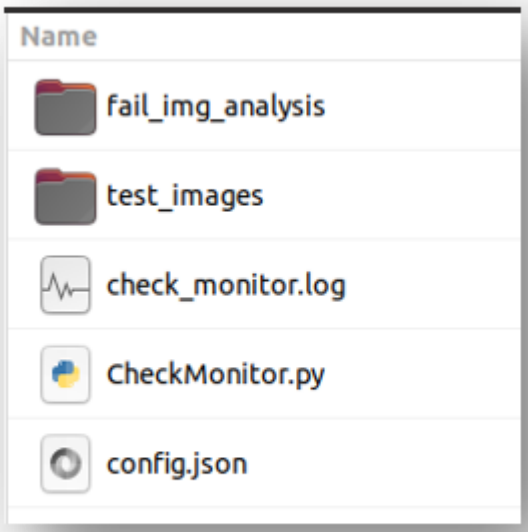
2.1 Running CheckMonitor.py

Open PowerShell or cmd and switch path to the place where CheckMonitor.py is.

Input Command:

```
python CheckMonitor.py <test_image_folder_path>
```

2.2 File structure



<CheckMonitor>

|

| - <fail_img_analysis> → Folder to save images for debugging.

| - check_monitor.log → The output log will be saved in this file.

| - CheckMonitor.py → Main python script for checking monitor.

| - config.json → The config file which is use by CheckMonitor.py

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3. Check Test Result

3.1 Check Logs

The logs will print file name and test result. You can check the test result from here.

Pass case:

```
2024-12-20 15:45:20,382 - INFO - Test image: blue.jpg
2024-12-20 15:45:20,455 - INFO - Test result: Pass
```

Failed case:

```
2024-12-20 15:45:20,455 - INFO - Test image: master.jpg
2024-12-20 15:45:20,525 - INFO - Test result: Failed
2024-12-20 15:45:20,526 - DEBUG - Dump stats:
2024-12-20 15:45:20,526 - DEBUG - [     0      0   1280    720 636480] 0.6906
2024-12-20 15:45:20,526 - DEBUG - [    56      8   1189    680 284258] 0.3084
2024-12-20 15:45:20,526 - DEBUG - [623  50  20   9 149] 0.0002
2024-12-20 15:45:20,526 - DEBUG - [660  50  20   9 145] 0.0002
2024-12-20 15:45:20,526 - DEBUG - [610  51  12   8  67] 0.0001
2024-12-20 15:45:20,526 - DEBUG - [647  50  12   9  60] 0.0001
2024-12-20 15:45:20,527 - DEBUG - [1180  716    5    4   18] 0.0000
2024-12-20 15:45:20,527 - DEBUG - [ 84 682  13   1  13] 0.0000
2024-12-20 15:45:20,527 - DEBUG - [219  17  12   1  12] 0.0000
```

If testing is failed, some debug logs will be printed.

3.2 Check fail_img_analysis Folder

If there is no image under fail_img_analysis folder, it means all testing results are pass. You can check the testing result quickly by this method.

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