OpenCV/Python Installation Guide

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Note: This install guide is probably only gonna work with a 64 bit Windows 10 Computer. Feel free to try it on anything else, but it probably won't work.

Python Installation

First, you must have Python 2.7 installed and added to your system path. Adding Python to your system path allows you to type python in the cmd window from any directory and it can run python scripts. This is important later on.

- 1. Download python 2.7 from the website: https://www.python.org/download/releases/2.7/
- 2. Install it to the default location, typically C:\Python27
- 3. Add Python to your System Path
 - a. In search bar, type environment variables, hit enter.
 - b. In the box that pops up, click Environment Variables
 - c. In the box that pops up, in the system variables section, scroll down to Path.
 - d. Click it, then click edit.
 - e. Click New, and add C:\Python27
 - f. Click New, and add C:\Python27\Scripts
 - g. Confirm everything, hitting OK a few times.
- 4. Test it by opening a NEW command window, and typing python. It should now look like this:

Command Prompt - python

```
Microsoft Windows [Version 10.0.15063]
(c) 2017 Microsoft Corporation. All rights reserved.
C:\Users\Kellen>python
Python 2.7.13 (v2.7.13:a06454b1afa1, Dec 17 2016, 20:42:59) [MSC v.1500 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

- Note that it says Python 2.7.13.
- Great, Python is now installed.

Pip Installation

Pip is a tool for python that lets you install all sorts of packages/modules/stuff. We need it to install everything from here on out.

- 1. Save this file somewhere on your computer: https://bootstrap.pypa.io/get-pip.py
- 2. Open a command prompt and navigate to that folder in the command prompt by typing cd <insert your directory here without the braces>
- 3. Type 'python get-pip.py' and hit enter, without the apostrophes
- 4. Pip should install itself.

OpenCV

Assuming the first two installs went well, now we get to install opency using pip. This is convenient and easy, however I can only confirm it works on x64 Windows 10 computers. No idea about Ubuntu, Raspbian, or OS X.

- 1. Open an command prompt in any directory.
- 2. Type pip install opency-contrib-python
- 3. Once it installs, test it by typing python, hitting enter, then typing "import cv2".
- 4. If that works with no errors (nothing should happen), that's great!