

## Installation Cheat Sheet - OpenCV 2.4.11 and C++ using Windows 7 + Visual Studio 2013 (Community Edition) + precompiled binaries

(should also work with Windows 8/8.1, not tested though)

download and install Visual Studio 2013 Community Edition (yes, its free) (choosing all default options will work fine)

download OpenCV 2.4.11

make a folder "C:\OpenCV-2.4.11" and extract OpenCV 2.4.11 to there

add the **bin** directory to the operating system PATH:

C:\OpenCV-2.4.11\opencv\build\x86\vc12\bin

pull up Command Prompt and verify bin directory is now in PATH, then reboot

start Visual Studio 2013, make a new project

choose Visual C++, Win32 Console Application, name as you prefer, ex "SimpleCanny1"

set preferred location, uncheck "Create directory for solution" and "Add to source control", choose OK,

choose Next, uncheck "Precompiled Header" and "Security Development",

check "Empty Project" and verify "Console application" radio button is checked

choose Finish

go to the Property Manager window, if this is not viewable by default go to:

View -> Other Windows -> Property Manager

to bring up Property Manager

in Property Manager, expand your program name, ex "SimpleCanny1", then expand "Debug | Win32"

right click on "Debug | Win32", choose "Add New Project Property Sheet"

name as preferred, ex. "OpenCV2411-Debug-32bit.props", choose Add

right click on *your* Property Sheet (do *not* modify one of the previously existing Prop Sheets), choose Properties

go to ***YourPropertySheet -> Properties -> VC++ Directories -> Include Directories:***

add the **include** directory: C:\OpenCV-2.4.11\opencv\build\include

verify "Inherit from parent or project defaults" is checked

go to ***YourPropertySheet -> Properties -> VC++ Directories -> Library Directories:***

add the **library** directory: C:\OpenCV-2.4.11\opencv\build\x86\vc12\lib

verify "Inherit from parent or project defaults" is checked

in Windows Explorer (not within Visual Studio), navigate to the **lib** directory:

C:\OpenCV-2.4.11\opencv\build\x86\vc12\lib

for the files that end in .lib, every other file will have a 'd' just before .lib, these are the *debug* libs

the libs that do not have a 'd' just before .lib are the *release* libs

since we will be using the debug build (Visual Studio default), we will use the debug libs

we have to add the debug libs to:

***YourPropertySheet -> Properties -> Linker -> Input -> Additional Dependencies***

you can copy/paste the debug lib names individually from Windows Explorer, or alternatively verify the debug libs in your "C:\OpenCV-2.4.10\opencv\build\x86\vc12\lib" directory are the same as this list:

debug (19 libs):

opencv\_calib3d2411d.lib  
opencv\_contrib2411d.lib  
opencv\_core2411d.lib  
opencv\_features2d2411d.lib  
opencv\_flann2411d.lib  
opencv\_gpu2411d.lib  
opencv\_highgui2411d.lib  
opencv\_imgproc2411d.lib  
opencv\_legacy2411d.lib  
opencv\_ml2411d.lib  
opencv\_nonfree2411d.lib  
opencv\_objdetect2411d.lib  
opencv\_ocl2411d.lib  
opencv\_photo2411d.lib  
opencv\_stitching2411d.lib  
opencv\_superres2411d.lib  
opencv\_ts2411d.lib  
opencv\_video2411d.lib  
opencv\_videostab2411d.lib

then copy/paste this list into:

***YourPropertySheet -> Properties -> Linker -> Input -> Additional Dependencies***  
***uncheck "Inherit from parent or project defaults" if checked***

next in the Visual Studio toolbar, verify that "Solution Configurations" and "Solution Platforms" are set to "Debug" and "Win32", respectively

**Note:** for future reference you do not need to set these settings again, simply copy/paste *YourPropertySheet* into the main directory of any new project, then go to:

***Property Manager -> right click on "Debug | Win32" -> Add Existing Property Sheet***

and choose the copy of *YourPropertySheet* you just made, this way you can change OpenCV import properties of any new project (ex to release or 64-bit if desired) without affecting your previous projects

choose Apply, then OK to close the Property Sheet Properties window

next, copy any JPEG image into the project directory and rename it "image.jpg"  
(unless you are going to use a webcam feed, in which case this is not necessary, see below)

right click in Solution Explorer, choose Add -> New Item  
name C++ file as preferred, ex. "SimpleCanny1.cpp"

from my MicrocontrollersAndMore GitHub page, copy/paste CannyStill.cpp (uses a still image), CannyWebcam.cpp (uses a webcam), or RedBallTracker.cpp (tracks a red ball, uses a webcam) and run (with or without debugging)