Installation Cheat Sheet - Emgu CV 2.4.10 (for Visual Basic.NET or C#) using Windows 7 + Visual Studio 2013 + with precompiled binaries

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

download Emgu CV 2.4.10 executable installer
(i.e. "libemgucv-windows-universal-cuda-2.4.10.1940.exe" or "libemgucv-windows-universal-2.4.10.1940.exe")

add something about MSVCRT 9.0 SP1 x86 or MSVCRT 9.0 SP1 x64 here !!??

add:
C:\Emgu\emgucv-windows-universal-cuda 2.4.10.1940\bin\x86
to operating system PATH

pull up Command Prompt and verify PATH now includes the above directory, then reboot

from my MicrocontrollersAndMore GitHub page decide which you are going to do:
CannyStill.vb (VB.NET, uses a still image)
CannyStill.cs (C#, uses a still image)
CannyWebcam.vb (VB.NET, uses a webcam)
CannyWebcam.cs (C#, uses a webcam)
RedBallTracker.vb (VB.NET, tracks a red ball, uses a webcam)
RedBallTracker.cs (C#, tracks a red ball, uses a webcam)

if you are going through this for the first time I suggest *CannyStill.vb*

start Visual Studio 2013
make new project
choose Visual Basic or Visual C#, Windows Forms Application
name the project as you prefer, ex "CannyStill1"
choose preferred project location
I recommend unchecking "Create directory for solution" and "Add to source control", then choose OK

save (continue saving throughout as needed)

rename form if desired, for example frmMain (much better to do this now than later, answer yes when asked if you would like to rename all references)

Project -> Add Reference -> Browse -> Browse...

navigate to C:\Emgu\emgucv-windows-universal-cuda 2.4.10.1940\bin

highlight the following 10 files:

Emgu.CV.DebuggerVisualizers.VS2013.dll
Emgu.CV.dll
Emgu.CV.GPU.dll
Emgu.CV.ML.dll
Emgu.CV.OCR.dll

Emgu.CV.OpenCL.dll
Emgu.CV.Stitching.dll
Emgu.CV.UI.dll
Emgu.CV.VideoStab.dll
Emgu.Util.dll

choose Add, make sure they are all checked, then choose OK

Project -> Add Existing Item

navigate to C:\Emgu\emgucv-windows-universal-cuda 2.4.10.1940\bin\x86

change viewable files to "All Files (*.*)"

highlight all files that start "opencv_" and end in ".dll", choose add

in Solution Explorer, highlight all DLLs just added
Properties -> Copy to Output Directory, set to "Copy Always"

the following will add the special Emgu controls to the Toolbox (you only have to do this once):
choose Design View (where you edit the form) if you are not in Design View already
bring up the Toolbox, the usual controls will be there (Button, Text Box, etc.)
expand General
right click in empty area of General, choose "Choose Items"
ImageBox will not be listed yet
choose "Browse..."
navigate to C:\Emgu\emgucv-windows-universal-cuda 2.4.10.1940\bin
double click on "Emgu.CV.UI.dll"
ImageBox should be listed now, check it if it is not already checked and choose OK
move ImageBox above the other Emgu controls, then move General to the top of the toolbox

depending on which of the 6 examples you are doing above, add the applicable controls to the form (found in the comments section at the top of the source), for example if you are using CannyStill.vb or CannyStill.cs, add the following:
btnOpenFile (Button)
lblChosenFile (Label)
ibOriginal (Emgu ImageBox)
ibCanny (Emgu ImageBox)
ofdOpenFile (OpenFileDialog)

you can use Containers to place components, or place by coordinates and use code to resize when the form is resized
oddly, the latter of these is often the most efficient option !!

verify the button is correctly named btnOpenFile, then double click on the button in the design view
this will write the first and last lines of btnOpenFile_Click() for you

copy/paste the *remaining code only* (do **not** copy/paste over the entire file and do **not** change the code that Visual

Studio wrote for you) from the example you chose, then run (with or without debugging)