OpenCV for Unity

iOS & Android support

Win & Mac Standalone support(Pro only)

Support for preview in the **Editor**.(**Pro only**)

Work with Unity Free & Pro

System Requirements

Build Win Standalone & Preview Editor: Windows7 or later Build Mac Standalone & Preview Editor: OSX 10.8 or later

"OpenCV for Unity" is Assets Plugin for using the OpenCV from Unity3D.

- Since making as a clone of OpenCV Java, you can use as it is all the <u>API Reference</u>
 <u>OpenCV Java</u>. (However, "org.opencv.android" and "SURF and SIFT of
 org.opencv.features2d(so nonfree)" are excluded.)
- Many classes of OpenCV for Unity implement IDisposable. You can be manage the resources by "using" statement.
- providing a method to interconversion of the Unity's Texture2D and OpenCV's Mat.
- You can image processing in real time by using the WebCamTexture of Unity. (real-time face detection are working smoothly in iPhone 5.)

Please download <u>Demo Application</u> for Android and watch <u>tutorial video</u>.

Version changes

- 1.0.7 [iOS]Support for arm64 build target.(Unity 4.6.1p3 or higher) [Common]Add Constructor VideoCapture(string filename). [Common]Add Method copyToMat(),copyFromMat().
- 1.0.6 [Android] Support for x86 build target. (Unity 4.6 or higher)
- 1.0.5 [Common] Bug fixes SampleScene.
- **1.0.4** [Common]Add Method matToTexture2D(Mat mat, Texture2D texture2D, Color32[] bufferColors = null).
- 1.0.3 [Common] Support for preview in the Editor. (Pro only) [Common] Support for Win & Mac Standalone. (Pro only) [Android] Change of location of the file that you want to use for Utils.getFilePath(). Changed to use "Aseets/StreamingAssets/" folder. [iOS] Add the file that you want to use for Utils.getFilePath() to Xcode project is no longer required. Changed to use "Aseets/StreamingAssets/" folder.
- 1.0.2 [iOS]fix library(libjpeg,libpng) version coflicts.
- 1.0.1 Initial version

Upgrade Guide

From 1.0.5 [Android]"OpenCVForUnity/Plugins/Android/"folder has been changed file configuration. Please delete "OpenCVForUnity/Plugins/Android/******.so".

From 1.0.2 [Android] If "Error: Duplicate file(s) in apk" occurs, Please delete the file with the same name in the "Plugins/Android/assets/"folder. [iOS] Add the cascade file to Xcode project is no longer required.

Android Setup

- Copy from "OpenCVForUnity/Plugins/Android/" to "Assets/Plugins/Android/" folder.(libnative_camera_r*.*.*.so is only required when using the VideoCapture.)
- Put the file that you want to use for Utils.getFilePath() in the "Aseets/StreamingAssets/"folder. (haarcascade_frontalface_alt.xml is for OpenCVForUnitySample.scene. Please copy only when necessary.)

iOS Setup

- Copy from "OpenCVForUnity/Plugins/iOS/" to "Assets/Plugin/iOS/" folder.
- Put the file that you want to use for Utils.getFilePath() in the "Aseets/StreamingAssets/"folder. (haarcascade_frontalface_alt.xml is for OpenCVForUnitySample.scene. Please copy only when necessary.)
- Link "OpenCVForUnity/iOS for Xcode/opencv2.framework" to Xcode project. (in Xcode project. Build Phases > Link Binary with Libraries > Add opencv2.framework . recommend to use PostprocessBuildPlayer.)

Win Standalone Setup

- Copy from "OpenCVForUnity/Plugins/x86/" to "Assets/Plugins/x86/" folder.
- Copy from "OpenCVForUnity/Plugins/x86_64/" to "Assets/Plugins/x86_64/" folder.
- Put the file that you want to use for Utils.getFilePath() in the "Aseets/StreamingAssets/".
- If you use the "VideoCapture(string filename)", require setup.
 - 1)Download "OpenCV for Windows Version 2.4.9"(http://opency.org/downloads.html).
 - 2)Set Path to "opency ffmpeg249.dll"
 - if 32bit, "C:\u224pencv\u224bin\u244\u224bin\u244\u224bin\u244\u224a.".
 - if 64bit, "C:\u00e4opencv\u00e4build\u00e4x64\u00e4vc10\u00e4bin\u00e4".

Mac Standalone Setup

- Copy from "OpenCVForUnity/Plugins/opencvforunity.bundle" to "Assets/Plugins/opencvforunity.bundle" folder.
- Put the file that you want to use for Utils.getFilePath() in the "Aseets/StreamingAssets/".

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