# FaceTracker Example 1.2.2



iOS & Android support
Windows10 UWP support
WebGL support
Win & Mac & Linux Standalone support
Support for preview in the Editor
Work with Unity Free & Pro

System Requirements
Build Win Standalone & Preview Editor : Windows8 or later
Build Mac Standalone & Preview Editor : OSX 10.9 or later

The execution of this asset is required "OpenCV for Unity".

This asset is a Non-rigid Face Tracking Example that can model and track the many complex parts of a person's face in WebCamTexture in real-time. Code is a rewrite of

https://github.com/MasteringOpenCV/code/tree/master/Chapter6\_NonRigidFaceTracking using "OpenCV for Unity".

- Texture2DFaceTrackerExample By detecting and tracking face from Texture2D, draw face's points and connections.
- WebCamTextureFaceTrackerExample By detecting and tracking face from WebCamTexture, draw face's points and connections.
- FaceTrackerARExample By using the tracking points of the face, display AR Object.

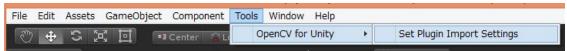
#### Official Site | ExampleCode | Android Demo | WebGL Demo | Demo Video

#### Version changes:

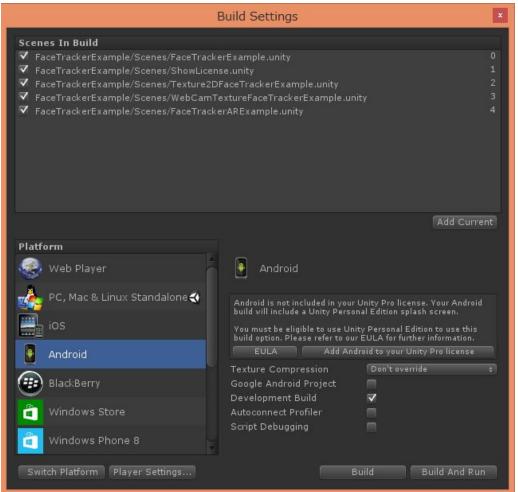
- **1.2.2** [Common]Updated for OpenCV for Unity v2.4.2.( This asset requires OpenCVforUnity 2.4.2 or later.) [Common]Refactored the script.
- **1.2.1** [Common]Fixed FaceTrackerARExample.
- **1.2.0** [Common]Updated for OpenCV for Unity v2.3.8.( This asset requires OpenCVforUnity 2.3.8 or later.)
- **1.1.9** [Common]Updated for OpenCV for Unity v2.3.3.( This asset requires OpenCVforUnity 2.3.3 or later.)
- ${\bf 1.1.8} \ [{\rm Common}] \ Updated \ to \ WebCamTextureToMatHelper.cs\ v1.0.4.\ [WebGL] Fixed \ WebCamTextureFaceTrackerExample \ and \ FaceTrackerARExample \ for \ WebGL\ platform.$
- 1.1.7 [UWP]Fixed for UWP.
- **1.1.6** [Common]Changed the name of asset project.("Sample" to "Example") [Common]Fixed WebCamTextureHelper.cs.
- 1.1.5 [Common]Updated WebCamTextureToMatHelper.cs.
- 1.1.4 [Common]Added AutoResetMode.
- **1.1.3** [Common]Improved the processing speed slightly.
- **1.1.2** [Common]Changed namespace to OpenCVFaceTracker.(To avoid namespace and classname conflict.) [Common]Fixed CS0618 warnings:
- `UnityEngine.Application.LoadLevel(string)' is obsolete: `Use SceneManager.LoadScene'.
- **1.1.1** [Common]Added namespace. [Common]Added flipVertical flag, flapHorizontal flag and GetWebCamDevice() method to WebCamTextureToMatHelper.cs.
- 1.1.0 [Common] Changed to methods of moving the AR object.
- 1.0.9 [Common] Support for "OpenCV for Unity 2.0.0".
- ${\bf 1.0.8} \ [{\bf Common}] Fixed \ Web Cam Texture To Mat Helper.cs. (Add \ did Update This Frame \ () \\ method)$
- ${\bf 1.0.7} \ [{\rm Common}] \ Renewed \ the \ samples \ using \ WebCamTextureToMatHelper. (Supports \ all \ screen \ orientation.)$
- **1.0.6** [Common] Change to use uGUI in SampleScene.
- 1.0.5 [iOS]Fix WebCamTexture bug of SampleScene in Unity5.2.
- 1.0.4 [Common]Rewrite SampleScene.
- 1.0.3 [Common]Add the code to support Beta Version of "OpenCV for Untiy" based on "OpenCV3.0.0".
- 1.0.2 [Common]Fix SampleScene.
- **1.0.1** [Common]Fix SampleScene. [Common] Change Property of Platform Dependent Compilation from UNITY\_IPHONE to UNITY\_IOS.
- 1.0.0 Initial version

## Quick setup procedure to run the example scenes:

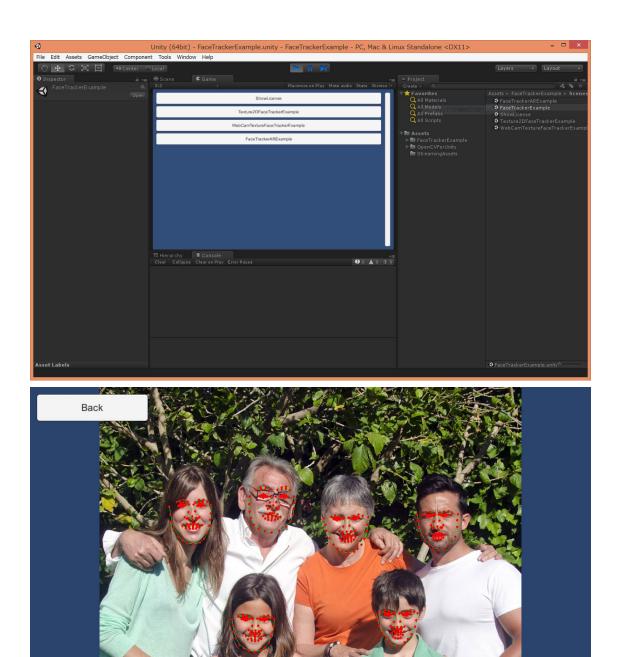
- 1. Import "OpenCVForUnity".
- 2. Select MenuItem[Tools/OpenCV for Unity/Set Plugin Import Settings].



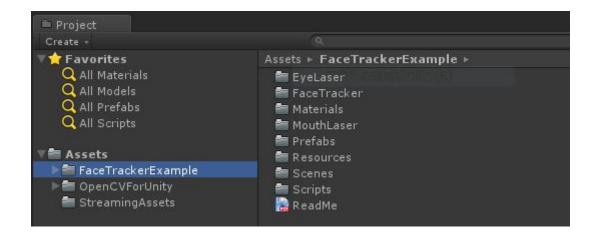
3. Add all of the "\*\*\*.unity" in the "FaceTrackerExample/Scenes" folder to [Build Settings] –[Scene In Build].



4. Run the FaceTrackerExample scene.



Screenshot after the setup



### Q&A

Q1.

How can I to create a "tracker\_model" file?

A1.

Please refer to "Mastering OpenCV with Practical Computer Vision Projects Chapter6" (<a href="http://www.packtpub.com/cool-projects-with-opency/book">http://www.packtpub.com/cool-projects-with-opency/book</a>). I convert "tracker\_model" file format into json from yaml and use it in "FaceTracker Sample".