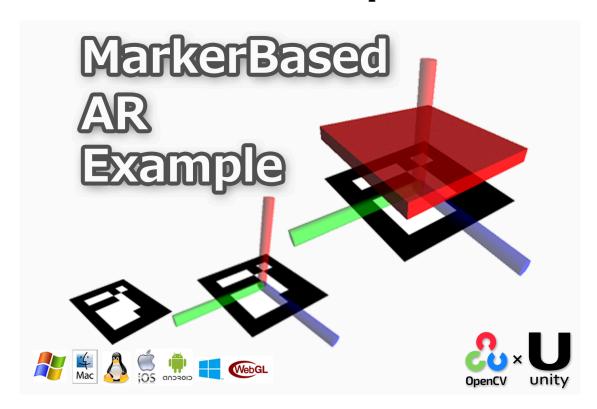
MarkerBased AR Example 1.2.7



WebGL support
iOS & Android support
Windows10 UWP 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 10.13 or later Build Linux Standalone & Preview Editor: Ubuntu 18.04 or later

> Build Android : API level 24 or later Build iOS : iOS Version 9.0 or later

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

This asset is an Augmented Reality Example that detect and recognize NxN block markers and display 3d model in WebCamTexture in real-time.

Code is a rewrite of

https://github.com/MasteringOpenCV/code/tree/master/Chapter2_iPhoneAR_using the "OpenCV for Unity".

- Texture2DMakerBasedARExample By detecting the marker from Texture2D, display AR model.
- WebCamTextureMakerBasedARExample By detecting a marker from WebCamTexture, display AR model in real-time.

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

GoogleVR With OpenCV for Unity Example is available.

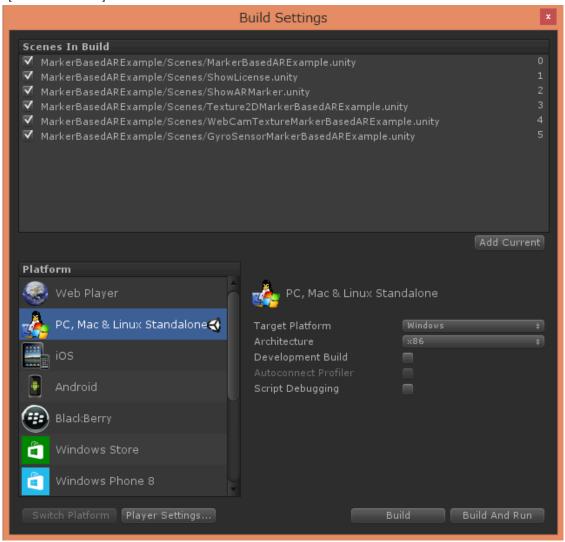
Version changes:

- **1.2.7** [Common]Changed the minimum supported version to Unity2021.3.35f1. [Common]Separated the examples using the Built-in Render Pipeline and Scriptable Render Pipeline.
- **1.2.6** [Common]Updated for OpenCV for Unity v2.5.9.(This asset requires OpenCVforUnity 2.5.9 or later.)
- **1.2.5** [Common]Updated for OpenCV for Unity v2.5.0.(This asset requires OpenCVforUnity 2.5.0 or later.)
- **1.2.4** [Common]Updated for OpenCV for Unity v2.4.2.(This asset requires OpenCVforUnity 2.4.2 or later.) [Common]Refactored the script.
- **1.2.3** [Common]Updated for OpenCV for Unity v2.3.8.(This asset requires OpenCVforUnity 2.3.8 or later.)
- **1.2.2** [Common]Updated for OpenCV for Unity v2.3.3.(This asset requires OpenCVforUnity 2.3.3 or later.)
- ${\bf 1.2.1} \ [{\rm Common}] Fixed \ getMarkerId() \ method. \ [{\rm Common}] Updated \\ WebCamTextureToMatHelper.cs \ v1.0.1.$
- 1.2.0 [Common] Changed the name of asset project. ("Sample" to "Example")
- 1.1.9 [Common]Fixed WebCamTextureToMatHelper.cs.(flipVertical and flipHorizontal flag)
- **1.1.8** [WebGL]Added WebGL(beta) support.(Unity5.3 or later)
- **1.1.7** [Common]Changed namespace to OpenCVMarkerBasedAR.(To avoid namespace and classname conflict.) [Common]Fixed CS0618 warnings:
- `UnityEngine.Application.LoadLevel(string)' is obsolete: `Use SceneManager.LoadScene'.
- **1.1.6** [Common]Added namespace. [Common]Added flipVertical flag, flapHorizontal flag and GetWebCamDevice() method to WebCamTextureToMatHelper.cs.
- **1.1.5** [Common] Changed to methods of moving the AR object.
- 1.1.4 [Common] Support for "OpenCV for Unity 2.0.0".
- $\textbf{1.1.3} \ [\textbf{Common}] Fixed \ Web Cam Texture To Mat Helper.cs. (Add \ did Update This Frame \ () \\ method)$
- ${\bf 1.1.2} \ [{\rm Common}] \ Renewed \ the \ samples \ using \ WebCamTextureToMatHelper. (Supports \ all \ screen \ orientation.)$
- **1.1.1** [Common]Added Marker Design Inspector.(Improved procedures to change the marker image)

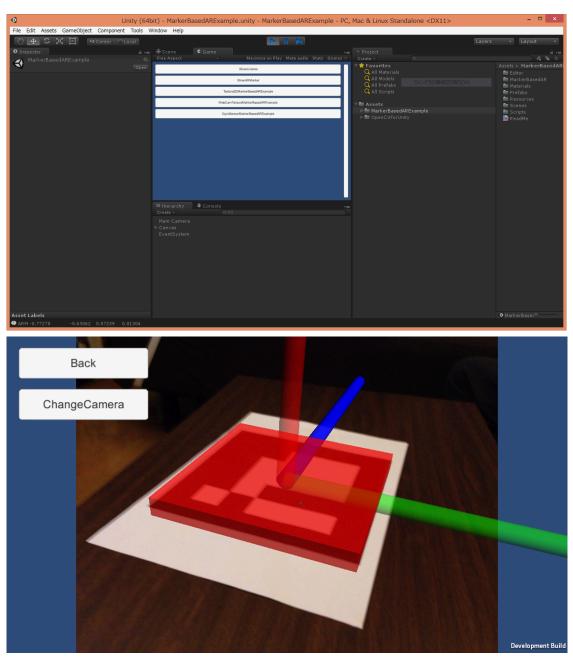
- 1.1.0 [Common] Change to use uGUI in SampleScene.
- 1.0.9 [iOS]Fix WebCamTexture bug of SampleScene in Unity5.2.
- ${\bf 1.0.8} \ [{\rm Common}] \\ {\rm Rewrite} \ {\rm Sample Scene}.$
- 1.0.7 [Common]Add the code to support Beta Version of "OpenCV for Untiy" based on "OpenCV3.0.0".
- 1.0.6 [Common]Fix SampleScene.
- **1.0.5** [Common]Fix SampleScene. [Common] Change Property of Platform Dependent Compilation from UNITY_IPHONE to UNITY_IOS.
- $1.0.4\ [{\rm Common}]{\rm Fix}$ the direction of rotation of the mat that is converted from WebCamTexture.
- 1.0.3 [Common]Fix direction of WebCamTexture.
- 1.0.2 [Common]Divide asset for Unity4 and Unity5.
- 1.0.1 [Common]Support for "OpenCV for Unity 1.0.9"
- 1.0.0 Initial version

Quick setup procedure to run the example scenes:

- 1. Import "OpenCVForUnity".
- 2. Add all of the "***.unity" in the "MarkerBasedARExample" folder to [Build Settings] –[Scene In Build].

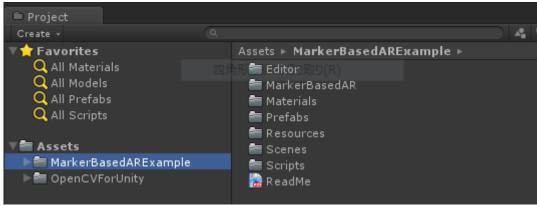


3. Run the MarkerBasedARExample scene.



 $4. \quad Print\ the\ marker\ image\ (MarkerBasedARExample/Resources/maker.png).$

Screenshot after the setup



Q&A

Ō

I want to change the Marker Image.

A. Marker design is changeable from the Inspector.



