# CV VTuber Example 1.0.0

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: Windows7 or later Build Mac Standalone & Preview Editor: OSX 10.9 or later

The execution of this asset is required "OpenCV for Unity" and "Dlib FaceLandmark Detector".

#### Features:

- CVVTuberExample(Computer Vision Virtual YouTuber Example) is an example project of controlling 3D humanoid model ("Unity-chan!" Model) using WebCamTexture. You can control the head orientation and the facial expression of the 3D humanoid model using WebCamTexture only.
- The head orientation and face expression are controlled by the following procedure.
  - WebCamTextureMatSourceGetter Convert WebCamTexture to OpenCV's Mat class.
  - 2. **DlibFaceLandmarkGetter** Detect a face landmark points from OpenCV's Mat class.
  - 3. **DlibHeadRotationGetter** Estimate head orientation from face landmark points.
  - 4. **HeadLookAtIKController** Set Animator.SetLookAtPosition() method using the estimated head orientation.
  - 5. HeadRotationController Control the head orientation of the 3D model using

the estimated head orientation.

6. **UnityChanDlibFaceBlendShapeController** - Control the face BlendShape of the 3D model using the face landmark point.

## ${\bf Examples:}$

• UnityChan CV VTuber Example

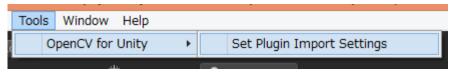
Official Site | ExampleCode | Android Demo WebGL Demo

### Version changes:

1.0.0 Initial version

### Quick setup procedure to run the example scenes:

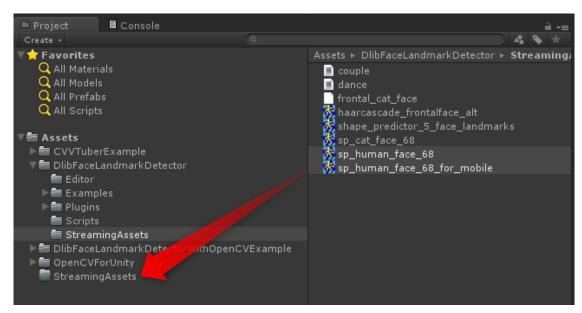
- 1. Import "CVVTuberExample".
- 2. Import "OpenCVForUnity".
- 3. Import "Dlib FaceLandmark Detector".
- 4. Import
  - "Assets/DlibFaceLandmarkDetector/DlibFaceLandmarkDetectorWithOpenCVExa mple.unitypackage".
- 5. Import ""Unity-chan!" Model".
- 6. Select MenuItem[Tools/OpenCV for Unity/Set Plugin Import Settings].



7. Select MenuItem[Tools/Dlib FaceLandmark Detector/Set Plugin Import Settings].

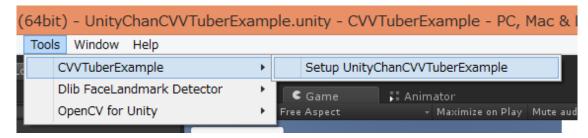


- 8. Move the "DlibFaceLandmarkDetector/StreamingAssets/sp\_human\_face\_68.dat" and
  - "DlibFaceLandmarkDetector/StreamingAssets/sp\_human\_face\_68\_for\_mobile.da t"to the "Assets/StreamingAssets/" folder.

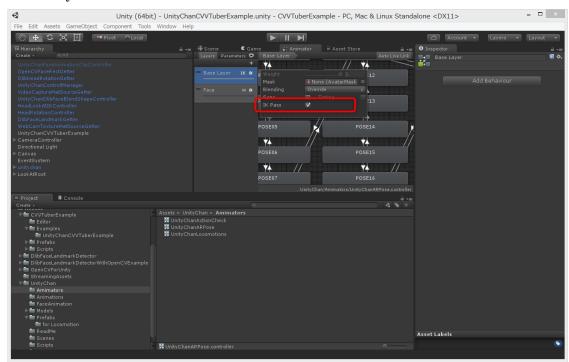


9. Open "Assets/CVVTuberExample/Examples/UnityChanCVVTuberExample" scene.

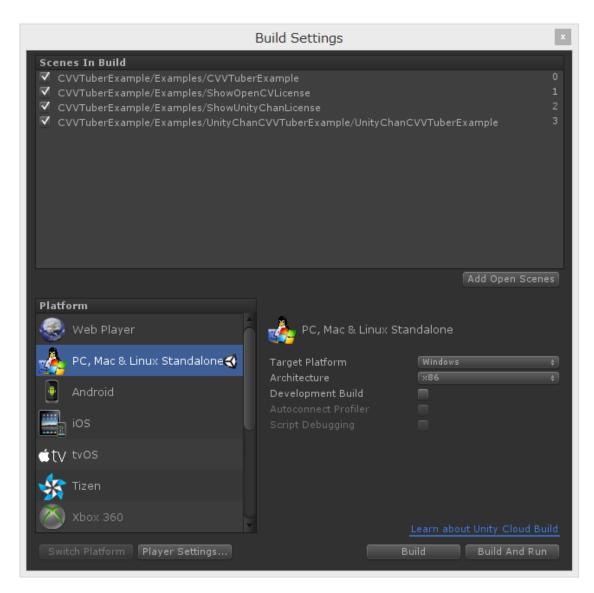
 $10. \ \ Select\ MenuItem [Tools/CVVTuber Example/UnityChan\ CVVTuber Example\ Setup].$ 



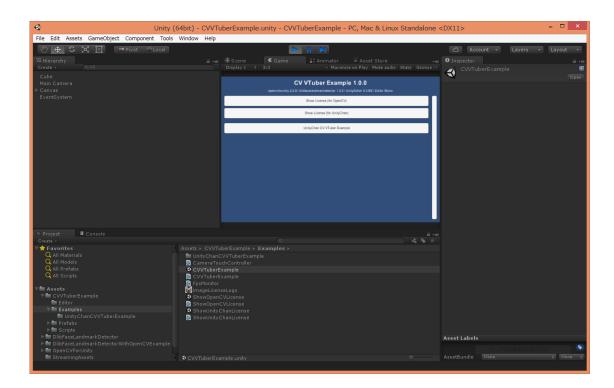
11. Click on UnityChanARPose to open the Animator window. Enable IK Pass flag of "Base Layer".



12. Add all of the "\*\*\*.unity" in the "CVVTuberExample/Examples" folder to [Build Settings] – [Scene In Build].



13. Run the CVVTuberExample scene.



### Screenshot after the setup

