Dlib FaceLandmark Detector 1.0.3

WebGL(beta) support**(Unity5.3 or later)**

iOS & **Android** support

WindowsStoreApps8.1 & **WindowsPhone8.1** & **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 10.8 or later

DlibFaceLandmarkDetector can **ObjectDetection** and **ShapePrediction** using Dlib19.0 C++ Library.

Features:

- You can detect **frontal human faces and face landmark(68 points)** in **Texture2D**, **WebCamTexture** and **Image byte array**. In addition, You can detect a different objects by changing trained data file.
- **ObjectDetector** is made using the now classic Histogram of Oriented Gradients (HOG) feature combined with a linear classifier, an image pyramid, and sliding window detection scheme. You can train your own detector in addition to human faces detector. If you want to train your own detector, please refer to this page.
- **ShapePredictor** is created by using dlib's implementation of the paper(One Millisecond Face Alignment with an Ensemble of Regression Trees by Vahid Kazemi and Josephine Sullivan, CVPR 2014). You can train your own models in addition to human face landmark model using dlib's machine learning tools. If you want to train your own models, please refer to this page.
- Advanced samples using "**OpenCV for Unity**" are Included.(The execution of this samples are required "OpenCV for Unity".)

Samples:

- Texture2DSample
- WebCamTextureSample
- CatDetectionSample

Advanced Samples(require OpenCV for Unity):

- Texture2DToMatSample
- WebCamTextureToMatSample
- WebCamTextureARSample
- VideoCaptureSample
- VideoCaptureARSample
- OptimizationSample

Official Site | SampleCode | Android Demo WebGL Demo | Setup Tutorial & Demo Video | Forum | API Reference

Version changes

1.0.3 [WebGL]Added WebGL(beta) support.(Unity5.3 or later) [Common]Fixed missing script error.(WebCamTextureToMatHelper.cs) [Common]Added shape_predictor_68_face_landmarks_for_mobile.dat.

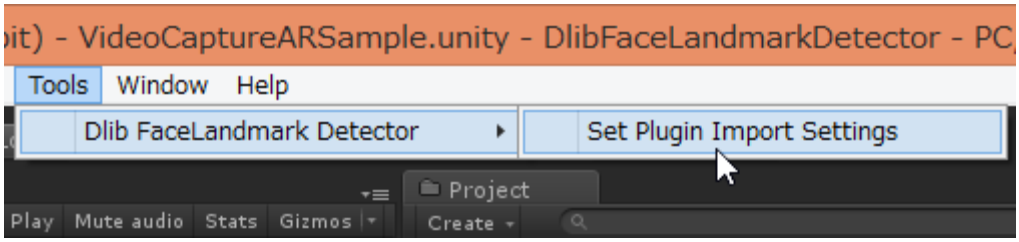
1.0.2 [Common]Improved WebCamTextureHelper class.

1.0.1 [Common]Added OptimizationSample. [Common]Added DetectRectDetection() method.

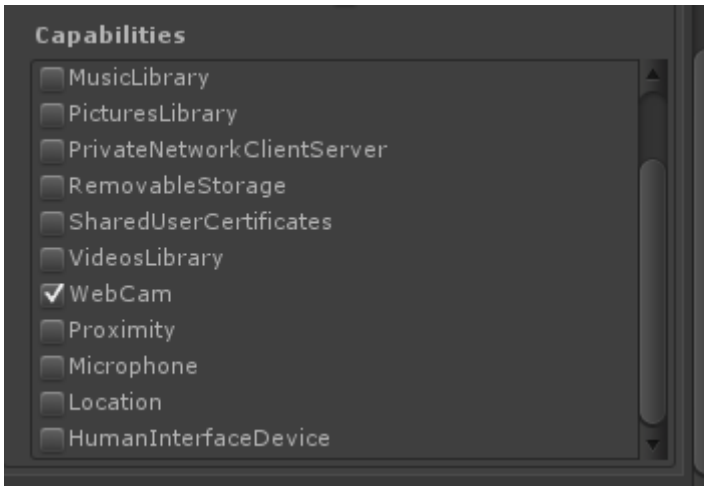
1.0.0 Initial version

Quick setup procedure to run the sample scene(Setup Tutorial Video)

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

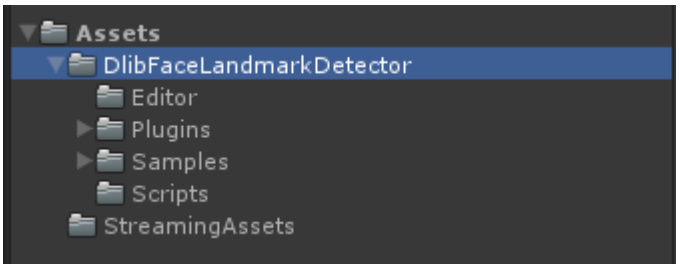


2. Move "DlibFaceLandmarkDetector/StreamingAssets/"folder to "Assets/"folder.
3. Add all of the "***.unity" in the "DlibFaceLandmarkDetector" folder to [Build Settings] – [Scene In Build].
4. [**WindowsStoreApps8.1** & **WindowsPhone8.1** & **Windows10 UWP**] If use webCamTextue class, Please choose "WebCam" in [PlayerSettings]-[PublishingSettings]-[Capabilities].



5. **[Linux]** Additional Setting is required to run on the editor. http://forum.unity3d.com/threads/native-plugin-in-editor-steam-specifically.384970/

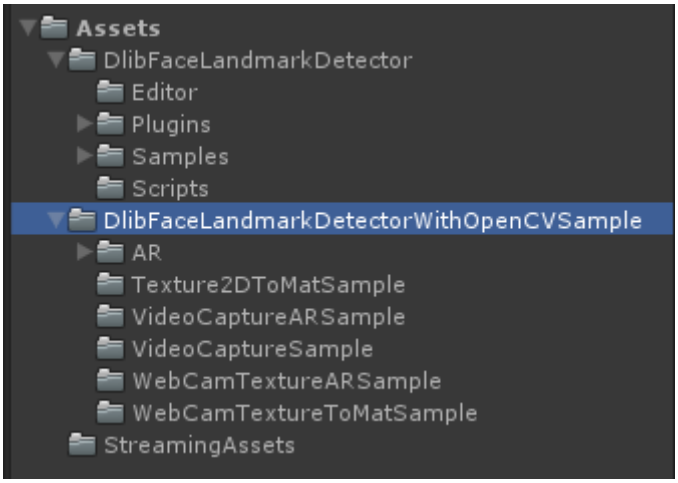
Screenshot after the setup



Quick setup procedure to run the Advanced samples using "OpenCV for Unity" scene

1. Import and Setup "OpenCV for Unity".
2. Unzip "DlibFaceLandmarkDetectorWithOpenCVSample.zip", Import DlibFaceLandmarkDetectorWithOpenCVSample.unitypackage.
3. Add all of the "***.unity" in the "DlibFaceLandmarkDetectorWithOpenCVSample" folder to [Build Settings] – [Scene In Build].

Screenshot after the setup



Q & A

Q1.

"DllNotFoundException: dlibfacelandmarkdetector" is displayed on the console when run the sample scene.

A1.

Plugin does not seem to be loaded correctly. Please check the setup procedure.

Q2.

"Level 'Texture2DSample' (-1) could not be loaded because it has not been added to the build settings." is displayed on the console when run the sample scene.

A2.

Please Add all of the “***.unity” in the “DlibFaceLandmarkDetector” folder to [Build Settings] – [Scene In Build].

Q3.

Red rectangle is not displayed around face.

A3.

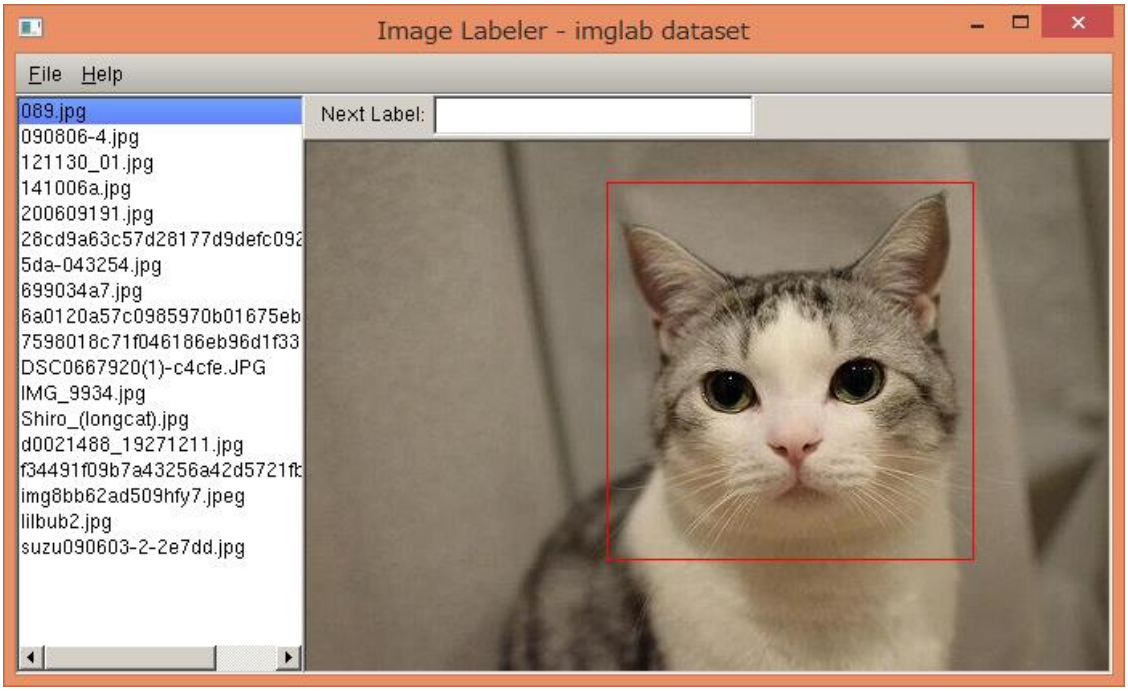
Please move “DlibFaceLandmarkDetector/StreamingAssets/”folder to “Assets/”folder.

Q4.

How can I train object detector ?

A4.

please refer to this page.

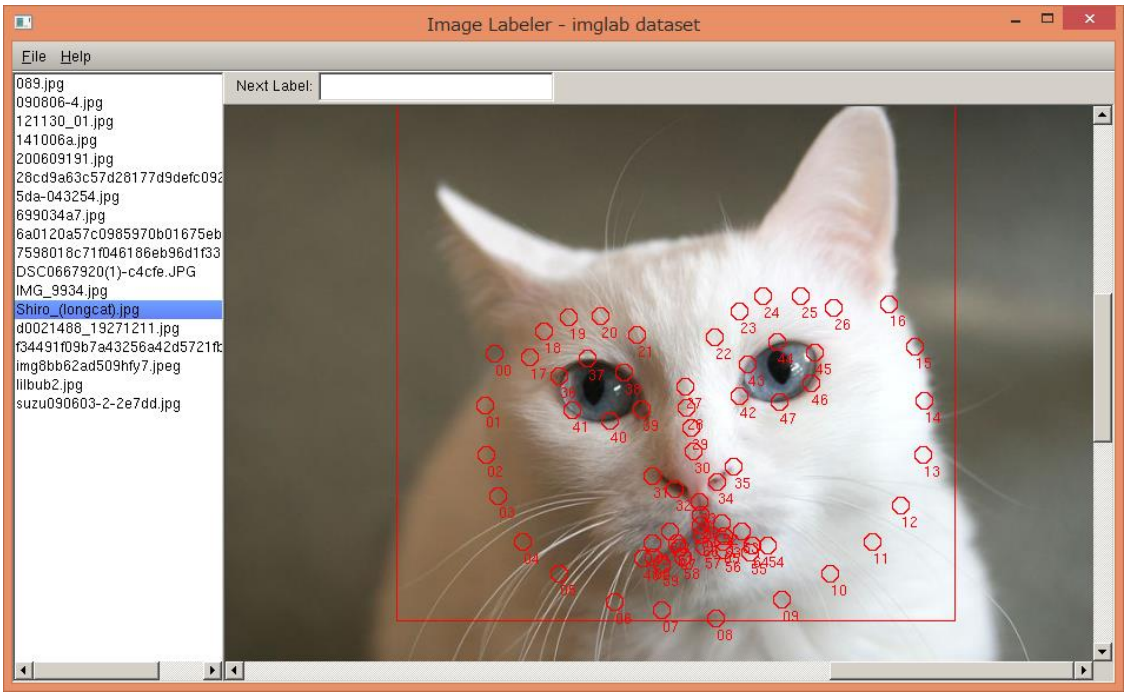


Q4.

How can I train shape predictor ?

A4.

please refer to [this page](#).



Q5.

The size of “shape_predictor_68_face_landmarks.dat” is too large.

A5.

Please use “shape_predictor_68_face_landmarks_for_mobile.dat”. (“shape_predictor_68_face_landmarks_for_mobile.dat” is less accurate than “shape_predictor_68_face_landmarks.dat”, but it is smaller size.)