OpenCV ObjectDetector

iOS & Android support

Work with Unity Free & Pro

OpenCV ObjectDetector can be the object detection(Sync or Async) from Texture2D by using OpenCV. You can get a processing result of cvHaarDetectObjects() of OpenCV using haar cascade file that you specified.Object detection parameters (same as the parameters of cvHaarDetectObjects ()) can be set in JSON format, You can get in JSON format Object detection result. Please read this guide and take a look at the included Demo Scene to see how to do this.Demo Application for Android.

Android Setup

- Copy from "OpenCVObjectDetector/Plugin/Android/" to "Assets/Plugin/Android/" folder.
- Put the haar cascade file that you want to use for object detection in the "Plugin/Android/assets/"folder.

iOS Setup

- Copy from "OpenCVObjectDetector/Plugin/iOS/" to "Assets/Plugin/iOS/" folder.
- Add the haar cascade file that you want to use for object detection to Xcode project.
- Link "OpenCVObjectDetector/iOS for Xcode/opencv2.framework" to Xcode project.
- Link "libc++.dylib" to Xcode project.

(recommend to use PostprocessBuildPlayer.)

Detect param example (JSON format)

```
{
   "filename":"haarcascade_frontalface_alt",    //haar cascade filename
   "scaleFactor":1.1, //Please refer to OpenCV cvHaarDetectObjects() arg.
   "minNeighbors":2, // Please refer to OpenCV cvHaarDetectObjects() arg.
   "flags":2,    // Please refer to OpenCV cvHaarDetectObjects() arg.
   "minWidth":80,    // Please refer to OpenCV cvHaarDetectObjects() arg.
   "minHeight":80,    // Please refer to OpenCV cvHaarDetectObjects() arg.

   "flipCode":0,    //(optional) flip the image in Detect. Please refer to OpenCV cv::flip arg.

   "rects":[    //(optional) Ranges of detection in Texture2D. To set when you want to detect part of the Texture2D. Texture2D is bottom-left origin.

      {
         "id":0,    // (optional)Id identify the detection range.default 0.
         "x":10,
         "y":10,
         "width":200,
         "height":300
      },
      {
         "id":1,    //(optional) Id identify the detection range.default 0.
         "x":200,
         "y":210,
         "width":150,
         "height":150
      }
   ]
}
```

Detect result example (JSON format)

```
{
   "haarcascade_frontalface_alt":[    //cascade filename that was used to detect.
      {
         "id":0,    //detection range id that you set in Detect param.
         "x":20,
         "y":35,
         "width":179,
         "height":179
      },
      {
         "id":1,    //detection range id that you set in Detect param.
         "x":211,
         "y":200,
         "width":100,
         "height":95
      }
   ]
}
```

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