# Python opencv 连接IP摄像头

## 准备

Python: 2.7

安装pip: <https://pip.pypa.io/en/stable/installing/>

设置系统变量

安装numpy: pip install numpy

安装opencv:

<http://opencv-python-tutroals.readthedocs.io/en/latest/py_tutorials/py_setup/py_setup_in_windows/py_setup_in_windows.html#install-opencv-python-in-windows>

Ffmpeg库配置: 把opencv/build/bin/opencv\_ffmpeg342.dll 复制到python2.7目录

## 示例代码

Main.py:

import cv2

cap = cv2.VideoCapture('http://admin:admin@192.168.1.114:8081/')

print cap.isOpened()

frameNum = 1

while cap.isOpened():

ret, frame = cap.read()

print frameNum

frameNum += 1

cv2.imshow('frame', frame)

if frameNum % 10 == 1:

cv2.imwrite('image'+str(frameNum)+'.jpg', frame)

if cv2.waitKey(1) == ord('q'):

break

cap.release()

cv2.destroyAllWindows()

## 官方文档

http://opencv-python-tutroals.readthedocs.io/en/latest/index.html

## 参考教程

<http://blog.51cto.com/guoeric/1852630>

<http://blog.51cto.com/guoeric/1852615>

# Java 连接IP摄像头

## 准备

把opencv/build/java所有文件复制到项目下opencv/

把opencv/build/bin/opencv\_ffmpeg342.dll复制到opencv/x64下

设置: File->Project Structure->Libraries->+opencv-345.jar

Run->Edit Configurations->VM options->

-Djava.library.path=$PROJECT\_DIR$\opencv\x64

## 示例代码

读取图片

import org.opencv.core.Core;

import org.opencv.core.Mat;

import org.opencv.imgcodecs.Imgcodecs;

public class FirstOpenCV {

static {

System.loadLibrary(Core.NATIVE\_LIBRARY\_NAME);

//注意程序运行的时候需要在VM option添加该行 指明opencv的dll文件所在路径

//-Djava.library.path=$PROJECT\_DIR$\opencv\x64

}

public static void main(String[] args) {

Mat mat = Imgcodecs.imread("D:/myTemp/Alice.jpg");

System.out.println(mat);

}

}

连接ip摄像头

videoCamera.java

import java.awt.Graphics;

import java.awt.image.BufferedImage;

import java.awt.image.DataBufferByte;

import javax.swing.JPanel;

import org.opencv.core.Mat;

import org.opencv.videoio.VideoCapture;

@SuppressWarnings("serial")

public class videoCamera extends JPanel

{

private VideoCapture camera;

videoCamera(VideoCapture cam)

{

camera = cam;

}

public static void main(String[] args)

{

}

private BufferedImage Mat2BufferedImage(Mat m)

{

int type = BufferedImage.TYPE\_BYTE\_GRAY;

if (m.channels() > 1)

{

type = BufferedImage.TYPE\_3BYTE\_BGR;

}

int bufferSize = m.channels() \* m.cols() \* m.rows();

byte[] b = new byte[bufferSize];

m.get(0, 0, b); // get all the pixels

BufferedImage img = new BufferedImage(m.cols(), m.rows(), type);

final byte[] targetPixels = ((DataBufferByte) img.getRaster().getDataBuffer()).getData();

System.arraycopy(b, 0, targetPixels, 0, b.length);

return img;

}

public void paintComponent(Graphics g)

{

super.paintComponent(g);

Mat mat = new Mat();

if( camera.read(mat))

{

System.out.print("IMAGE");

}

BufferedImage image = Mat2BufferedImage(mat);

g.drawImage(image,10,10,image.getWidth(),image.getHeight(), null);

}

}

openCVTest.java

import java.io.IOException;

import javax.swing.\*;

import org.opencv.core.Core;

import org.opencv.videoio.VideoCapture;

public class openCVTest

{

public openCVTest()

{

}

public static void main(String[] args) throws IOException

{

System.loadLibrary("opencv\_ffmpeg342\_64");

System.loadLibrary(Core.NATIVE\_LIBRARY\_NAME);

VideoCapture camera = new VideoCapture("http://admin:admin@192.168.1.114:8081/");

if (camera.isOpened())

{

System.out.println("Video is captured");

}

else

{

System.out.println();

}

videoCamera cam = new videoCamera(camera);

JFrame frame = new JFrame();

frame.setDefaultCloseOperation(WindowConstants.EXIT\_ON\_CLOSE);

frame.add(cam);

frame.setSize(800,800);

frame.setVisible(true);

while(camera.isOpened())

{

cam.repaint();

}

}

}

## 官方文档

<https://opencv-java-tutorials.readthedocs.io/en/latest/index.html>

## 参考教程

<https://www.cnblogs.com/superbool/p/5323211.html>

https://stackoverflow.com/questions/26535645/ip-camera-with-opencv-in-java