
OpenCV安装教程

吕成城

November 8, 2018

1 前期准备

- Visual Studio (版本不限，我用的Community 2017) 戳[这里](#)下载并安装
- OpenCV源文件 (版本不限，最好选择3.x版本，我用的3.4.1) 戳[这里](#)下载并解压
- OpenCV扩展库 (版本不限，但要和源文件版本一致) 戳[这里](#)下载并解压
该库中包含一系列含有专利的算法文件，需要额外配置
- CMake (版本不限) 戳[这里](#)下载并解压
- 全程安装或解压的路径不要含有中文符号

2 安装步骤(以WIN10+VS2017+OPENCV3.4.1为例)

CMAKE部分

1. 打开CMake解压文件夹下...\bin\cmake-gui.exe
2. 在 *Where is the source code:* 栏填写OpenCV源文件解压后的地址: ...\opencv\sources
3. 在 *Where is the source code:* 栏填写目标文件夹地址: ...\opencv\build

4. 点击Configure，在Specify the generator for this project中选择安装的VS版本，点击Finish
5. 往opencv中添加opencv_contrib模块，找到OPENCV_EXTRA_MODULES_PATH，后面添加...\opencv_contrib-3.4.1\modules，再次点击Configure，若有红色的块接着点Configure，直至红色块消失
6. 点击Generate，提示Generate Done即可

VISUAL STUDIO部分

1. 在Visual Studio中打开...\opencv\build下的OpenCV.sln工程
2. 找到解决方案资源管理器下的CMakeTargets下的INSTALL，在Debug和Release下(注意都要选择x64)分别右键生成，该步操作作用时会比较长

环境配置部分

1. 进入环境变量配置界面，在系统变量的Path下添加...\opencv\build\install\x64\vc15\bin
2. 回到VS中，进入资源管理器，任意点击一个条目，分别右击Debug和Release下的Microsoft.Cpp.x64.user进入其属性进行配置
3. 在VC++目录下的包含目录中添加以下三项：...\opencv\build\install\include;
...\opencv\build\install\include\opencv; ...\opencv\build\install\include\opencv2
在库目录中添加：...\opencv\build\install\x64\vc15\lib
4. 点击链接器下的输入，在附加依赖项中添加以下所有内容用分号隔开：
opencv_aruco341d.lib
opencv_bgsegm341d.lib
opencv_bioinspired341d.lib
opencv_calib3d341d.lib
opencv_ccalib341d.lib
opencv_core341d.lib
opencv_datasets341d.lib
opencv_dnn341d.lib
opencv_dpm341d.lib
opencv_face341d.lib
opencv_features2d341d.lib
opencv_flann341d.lib
opencv_hal341d.lib

opencv_highgui341d.lib
opencv_imgcodecs341d.lib
opencv_imgproc341d.lib
opencv_line_descriptor341d.lib
opencv_ml341d.lib
opencv_objdetect341d.lib
opencv_optflow341d.lib
opencv_photo341d.lib
opencv_reg341d.lib
opencv_rgbd341d.lib
opencv_saliency341d.lib
opencv_shape341d.lib
opencv_stereo341d.lib
opencv_stitching341d.lib
opencv_structured_light341d.lib
opencv_superres341d.lib
opencv_surface_matching341d.lib
opencv_text341d.lib
opencv_tracking341d.lib
opencv_ts341d.lib
opencv_video341d.lib
opencv_videoio341d.lib
opencv_videostab341d.lib
opencv_xfeatures2d341d.lib
opencv_ximgproc341d.lib
opencv_xobjdetect341d.lib
opencv_xphoto300d.lib

5. 点击应用，大功告成！