



1. 安装 Anaconda
2. 安装虚拟环境
3. 安装 OpenCV, Numpy, Matplotlib

Search Environments

base (root)

test

Installed

Channels

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Search Packages

Name	Description
notebook	Jupyter notebook
numpy	Array processing for numbers, strings, records, and objects.
numpy-base	
olefile	Parse, read and write microsoft ole2 files
opencv	Computer vision and machine learning software library.
openssl	Openssl is an open-source implementation of the ssl and tls protocols
packaging	Core utilities for python packages
pandocfilters	A python module for writing pandoc filters
parso	A python parser

base (root)

test

Name	Description
m2w64-gcc-libs-core	
m2w64-gmp	
m2w64-libwinpthread-git	
markupsafe	A python module that implements the jinja2.markup string
matplotlib	Publication quality figures in python
matplotlib-base	
matplotlib-inline	
mistune	The fastest markdown parser in pure python.
mkl	Math library for intel and compatible processors
mkl-fft	
mkl-random	
mkl-service	Python bindings to mkl service functions



4. 学习 Numpy 和 CV2 工具包的使用

5. 用 OpenCV 检测人脸

```
In [1]: import cv2 as cv

In [2]: img = cv.imread('D:\FirstTerm\computer_vision\homework\lena.jpg', 1)

cv.imshow("Raw Image", img)

gray = cv.cvtColor(img, cv.COLOR_BGR2GRAY)
detector = cv.CascadeClassifier("haarcascade_frontalface_default.xml")
results = detector.detectMultiScale(gray, 1.5, 5)
for x,y,w,h in results:
    cv.rectangle(img, (x, y), (x + w, y + h), (0, 0, 255), 2)

text_str = "Lena"
font_face = cv.FONT_HERSHEY_DUPLEX
font_scale = 0.8
font_thickness = 1
text_w, text_h = cv.getTextSize(text_str, font_face, font_scale, font_thickness)[0]

text_pt = (x - 60, y - 30)
text_color = [255, 0, 0]

cv.putText(img, text_str, text_pt, font_face, font_scale, text_color, font_thickness, cv.LINE_AA)

cv.imshow("Face Detection", img)
cv.waitKey(0)
```

