**【OpenCV 例程200篇】16. 不同尺寸的图像加法**

**【OpenCV 例程200篇】16. 不同尺寸的图像加法**

**欢迎关注**[**『OpenCV 例程200篇』**](https://blog.csdn.net/youcans/category_11459626.html)**系列，持续更新中**  
**欢迎关注**[**『Python小白的OpenCV学习课』**](https://blog.csdn.net/youcans/category_11490243.html)**系列，持续更新中**

函数 cv2.add() 用于图像的加法运算， 对两张相同大小和类型的图像进行加法运算，或对一张图像与一个标量进行加法运算。

**函数说明：**

cv2.add(src1, src2 [, dst[, mask[, dtype]]) → dst

* 1

函数 cv2.addWeight() 用于图像的加权加法运算，对两张相同大小和类型的图像按权重相加，可以实现图像的叠加和混合。

**函数说明：**

cv2.addWeighted(src1, alpha, src2, beta, gamma[, dst[, dtype]]) → dst

* 1

**注意事项：**

1. 使用函数 cv2.add()、cv2.addWeight() 对两张图片相加时，图片的大小和类型（通道数）必须相同。
2. 对于不同尺寸的图像加法，将小图叠加到大图的指定位置，可以按扩展例程 1.25 处理。

**扩展例程：1.25 不同尺寸的图像加法**

# 1.25 不同尺寸的图像加法

imgL = cv2.imread("../images/imgB2.jpg") # 读取大图

imgS = cv2.imread("../images/logoCV.png") # 读取小图 (LOGO)

x,y = 300,50 # 叠放位置

W1, H1 = imgL.shape[1::-1] # 大图尺寸

W2, H2 = imgS.shape[1::-1] # 小图尺寸

if (x + W2) > W1: x = W1 - W2 # 调整图像叠放位置，避免溢出

if (y + H2) > H1: y = H1 - H2

imgCrop = imgL[y:y + H2, x:x + W2] # 裁剪大图，与小图 imgS 的大小相同

imgAdd = cv2.add(imgCrop, imgS) # cv2 加法，裁剪图与小图叠加

alpha, beta, gamma = 0.2, 0.8, 0.0 # 加法权值

imgAddW = cv2.addWeighted(imgCrop, alpha, imgS, beta, gamma) # 加权加法，裁剪图与小图叠加

imgAddM = np.array(imgL)

imgAddM[y:y + H2, x:x + W2] = imgAddW # 用叠加小图替换原图 imgL 的叠放位置

cv2.imshow("imgAdd", imgAdd)

cv2.imshow("imgAddW", imgAddW)

cv2.imshow("imgAddM", imgAddM)

cv2.waitKey(0)

需要说明的是，对不同尺寸的图像叠加可以有不同的理解和处理。本例程是将小图叠加到大图的指定位置，运行结果如下图所示。

  
（本节完）

**欢迎关注**[**『OpenCV 例程200篇』**](https://blog.csdn.net/youcans/category_11459626.html)**系列，持续更新中**  
**欢迎关注**[**『Python小白的OpenCV学习课』**](https://blog.csdn.net/youcans/category_11490243.html)**系列，持续更新中**

[【OpenCV 例程200篇】01. 图像的读取（cv2.imread）](https://blog.csdn.net/youcans/article/details/121168935)  
[【OpenCV 例程200篇】02. 图像的保存（cv2.imwrite）](https://blog.csdn.net/youcans/article/details/121169014)  
[【OpenCV 例程200篇】03. 图像的显示（cv2.imshow）](https://blog.csdn.net/youcans/article/details/121169054)  
[【OpenCV 例程200篇】04. 用 matplotlib 显示图像（plt.imshow）](https://blog.csdn.net/youcans/article/details/121169102)  
[【OpenCV 例程200篇】05. 图像的属性（np.shape）](https://blog.csdn.net/youcans/article/details/121169179)  
[【OpenCV 例程200篇】06. 像素的编辑（img.itemset）](https://blog.csdn.net/youcans/article/details/121169212)  
[【OpenCV 例程200篇】07. 图像的创建（np.zeros）](https://blog.csdn.net/youcans/article/details/121174586)  
[【OpenCV 例程200篇】08. 图像的复制（np.copy）](https://blog.csdn.net/youcans/article/details/121174613)  
[【OpenCV 例程200篇】09. 图像的裁剪（cv2.selectROI）](https://blog.csdn.net/youcans/article/details/121174622)  
[【OpenCV 例程200篇】10. 图像的拼接（np.hstack）](https://blog.csdn.net/youcans/article/details/121174643)  
[【OpenCV 例程200篇】11. 图像通道的拆分（cv2.split）](https://blog.csdn.net/youcans/article/details/121174708)  
[【OpenCV 例程200篇】12. 图像通道的合并（cv2.merge）](https://blog.csdn.net/youcans/article/details/121174740)  
[【OpenCV 例程200篇】13. 图像的加法运算（cv2.add）](https://blog.csdn.net/youcans/article/details/121191440)  
[【OpenCV 例程200篇】14. 图像与标量相加（cv2.add）](https://blog.csdn.net/youcans/article/details/121191469)  
[【OpenCV 例程200篇】15. 图像的加权加法（cv2.addWeight）](https://blog.csdn.net/youcans/article/details/121191534)  
[【OpenCV 例程200篇】16. 不同尺寸的图像加法](https://blog.csdn.net/youcans/article/details/121234811)  
[【OpenCV 例程200篇】17. 两张图像的渐变切换](https://blog.csdn.net/youcans/article/details/121244153)  
[【OpenCV 例程200篇】18. 图像的掩模加法](https://blog.csdn.net/youcans/article/details/121244290)  
[【OpenCV 例程200篇】19. 图像的圆形遮罩](https://blog.csdn.net/youcans/article/details/121244360)  
[【OpenCV 例程200篇】20. 图像的按位运算](https://blog.csdn.net/youcans/article/details/121244431)  
[【OpenCV 例程200篇】21. 图像的叠加](https://blog.csdn.net/youcans/article/details/121265151)  
[【OpenCV 例程200篇】22. 图像添加非中文文字](https://blog.csdn.net/youcans/article/details/121287815)  
[【OpenCV 例程200篇】23. 图像添加中文文字](https://blog.csdn.net/youcans/article/details/121287886)  
[【OpenCV 例程200篇】23. 图像添加中文文字](https://blog.csdn.net/youcans/article/details/121287886)  
[【OpenCV 例程200篇】24. 图像的仿射变换](https://blog.csdn.net/youcans/article/details/121301596)  
[【OpenCV 例程200篇】25. 图像的平移](https://blog.csdn.net/youcans/article/details/121309503)  
[【OpenCV 例程200篇】26. 图像的旋转（以原点为中心）](https://blog.csdn.net/youcans/article/details/121314279)  
[【OpenCV 例程200篇】27. 图像的旋转（以任意点为中心）](https://blog.csdn.net/youcans/article/details/121314339)  
[【OpenCV 例程200篇】28. 图像的旋转（直角旋转）](https://blog.csdn.net/youcans/article/details/121314339)  
[【OpenCV 例程200篇】29. 图像的翻转（cv2.flip）](https://blog.csdn.net/youcans/article/details/121333357)  
[【OpenCV 例程200篇】30. 图像的缩放（cv2.resize）](https://blog.csdn.net/youcans/article/details/121333461)  
[【OpenCV 例程200篇】31. 图像金字塔（cv2.pyrDown）](https://blog.csdn.net/youcans/article/details/121348768)  
[【OpenCV 例程200篇】32. 图像的扭变（错切）](https://blog.csdn.net/youcans/article/details/121348860)  
[【OpenCV 例程200篇】33. 图像的复合变换](https://blog.csdn.net/youcans/article/details/121370178)  
[【OpenCV 例程200篇】34. 图像的投影变换](https://blog.csdn.net/youcans/article/details/121382552)  
[【OpenCV 例程200篇】35. 图像的投影变换（边界填充）](https://blog.csdn.net/youcans/article/details/121398056)  
[【OpenCV 例程200篇】36. 直角坐标与极坐标的转换](https://blog.csdn.net/youcans/article/details/121416883)  
[【OpenCV 例程200篇】37. 图像的灰度化处理和二值化处理](https://blog.csdn.net/youcans/article/details/121451915)  
[【OpenCV 例程200篇】38. 图像的反色变换（图像反转）](https://blog.csdn.net/youcans/article/details/121453961)  
[【OpenCV 例程200篇】39. 图像灰度的线性变换](https://blog.csdn.net/youcans/article/details/121454105)  
[【OpenCV 例程200篇】40. 图像分段线性灰度变换](https://blog.csdn.net/youcans/article/details/121475182)  
[【OpenCV 例程200篇】41. 图像的灰度变换（灰度级分层）](https://blog.csdn.net/youcans/article/details/121490904)  
[【OpenCV 例程200篇】42. 图像的灰度变换（比特平面分层）](https://blog.csdn.net/youcans/article/details/121191241)  
[【OpenCV 例程200篇】43. 图像的灰度变换（对数变换）](https://blog.csdn.net/youcans/article/details/121508842)  
[【OpenCV 例程200篇】44. 图像的灰度变换（伽马变换）](https://blog.csdn.net/youcans/article/details/121508973)  
[【OpenCV 例程200篇】45. 图像的灰度直方图](https://blog.csdn.net/youcans/article/details/121543352)  
[【OpenCV 例程200篇】46. 直方图均衡化](https://blog.csdn.net/youcans/article/details/121568773)  
[【OpenCV 例程200篇】47. 图像增强—直方图匹配](https://blog.csdn.net/youcans/article/details/121587348)  
[【OpenCV 例程200篇】48. 图像增强—彩色直方图匹配](https://blog.csdn.net/youcans/article/details/121669929)  
[【OpenCV 例程200篇】49. 图像增强—局部直方图处理](https://blog.csdn.net/youcans/article/details/121691770)  
[【OpenCV 例程200篇】50. 图像增强—直方图统计量图像增强](https://blog.csdn.net/youcans/article/details/121706228)  
[【OpenCV 例程200篇】51. 图像增强—直方图反向追踪](https://blog.csdn.net/youcans/article/details/121711396)  
[【OpenCV 例程200篇】52. 图像的相关与卷积运算](https://blog.csdn.net/youcans/article/details/121711396)  
[【OpenCV 例程200篇】53. Scipy 实现图像二维卷积](https://blog.csdn.net/youcans/article/details/121783234)  
[【OpenCV 例程200篇】54. OpenCV 实现图像二维卷积](https://blog.csdn.net/youcans/article/details/121805211)  
[【OpenCV 例程200篇】55. 可分离卷积核](https://blog.csdn.net/youcans/article/details/121848350)  
[【OpenCV 例程200篇】56. 低通盒式滤波器](https://blog.csdn.net/youcans/article/details/121870848)  
[【OpenCV 例程200篇】57. 低通高斯滤波器](https://blog.csdn.net/youcans/article/details/121898393)  
[【OpenCV 例程200篇】58. 非线性滤波—中值滤波](https://blog.csdn.net/youcans/article/details/121930126)  
[【OpenCV 例程200篇】59. 非线性滤波—双边滤波](https://blog.csdn.net/youcans/article/details/121944019)  
[【OpenCV 例程200篇】60. 非线性滤波—联合双边滤波](https://blog.csdn.net/youcans/article/details/121989343)  
[【OpenCV 例程200篇】61. 导向滤波（Guided filter）](https://blog.csdn.net/youcans/article/details/122008763)  
[【OpenCV 例程200篇】62. 图像锐化——钝化掩蔽](https://blog.csdn.net/youcans/article/details/122034827)  
[【OpenCV 例程200篇】63. 图像锐化——Laplacian 算子](https://blog.csdn.net/youcans/article/details/122091412)  
[【OpenCV 例程200篇】64. 图像锐化——Sobel 算子](https://blog.csdn.net/youcans/article/details/122152278)  
[【OpenCV 例程200篇】65. 图像锐化——Scharr 算子](https://blog.csdn.net/youcans/article/details/122265208)  
[【OpenCV 例程200篇】66. 图像滤波之低通/高通/带阻/带通](https://blog.csdn.net/youcans/article/details/122283819)  
[【OpenCV 例程200篇】67. 空间域图像增强的综合应用](https://blog.csdn.net/youcans/article/details/122453543)  
[【OpenCV 例程200篇】68. 空间域图像增强的综合应用](https://blog.csdn.net/youcans/article/details/122487447)  
[【OpenCV 例程200篇】69. 连续非周期信号的傅立叶系数](https://blog.csdn.net/youcans/article/details/122519389)  
[【OpenCV 例程200篇】70. 一维连续函数的傅里叶变换](https://blog.csdn.net/youcans/article/details/122519421)  
[【OpenCV 例程200篇】71. 连续函数的取样](https://blog.csdn.net/youcans/article/details/122519452)  
[【OpenCV 例程200篇】72. 一维离散傅里叶变换](https://blog.csdn.net/youcans/article/details/122537799)  
[【OpenCV 例程200篇】73. 二维连续傅里叶变换](https://blog.csdn.net/youcans/article/details/122537836)  
[【OpenCV 例程200篇】74. 图像的抗混叠](https://blog.csdn.net/youcans/article/details/122614044)  
[【OpenCV 例程200篇】75. Numpy 实现图像傅里叶变换](https://blog.csdn.net/youcans/article/details/122614107)  
[【OpenCV 例程200篇】76. OpenCV 实现图像傅里叶变换](https://blog.csdn.net/youcans/article/details/122614167)  
[【OpenCV 例程200篇】77. OpenCV 实现快速傅里叶变换](https://blog.csdn.net/youcans/article/details/122633243)  
[【OpenCV 例程200篇】78. 频率域图像滤波基础](https://blog.csdn.net/youcans/article/details/122660830)  
[【OpenCV 例程200篇】79. 频率域图像滤波的基本步骤](https://blog.csdn.net/youcans/article/details/122660873)  
[【OpenCV 例程200篇】80. 频率域图像滤波详细步骤](https://blog.csdn.net/youcans/article/details/122695538)  
[【OpenCV 例程200篇】81. 频率域高斯低通滤波器](https://blog.csdn.net/youcans/article/details/122695721)  
[【OpenCV 例程200篇】82. 频率域巴特沃斯低通滤波器](https://blog.csdn.net/youcans/article/details/122711769)  
[【OpenCV 例程200篇】83. 频率域低通滤波：印刷文本字符修复](https://blog.csdn.net/youcans/article/details/122727478)  
[【OpenCV 例程200篇】84. 由低通滤波器得到高通滤波器](https://blog.csdn.net/youcans/article/details/122739287)  
[【OpenCV 例程200篇】85. 频率域高通滤波器的应用](https://blog.csdn.net/youcans/article/details/122750197)  
[【OpenCV 例程200篇】86. 频率域滤波应用：指纹图像处理](https://blog.csdn.net/youcans/article/details/122758106)  
[【OpenCV 例程200篇】87. 频率域钝化掩蔽](https://blog.csdn.net/youcans/article/details/122762724)  
[【OpenCV 例程200篇】88. 频率域拉普拉斯高通滤波](https://blog.csdn.net/youcans/article/details/122768067)  
[【OpenCV 例程200篇】89. 带阻滤波器的传递函数](https://blog.csdn.net/youcans/article/details/122774036)  
[【OpenCV 例程200篇】90. 频率域陷波滤波器](https://blog.csdn.net/youcans/article/details/122781106)  
[【OpenCV 例程200篇】91. 高斯噪声、瑞利噪声、爱尔兰噪声](https://blog.csdn.net/youcans/article/details/122787861)  
[【OpenCV 例程200篇】92. 指数噪声、均匀噪声、椒盐噪声](https://blog.csdn.net/youcans/article/details/122795650)  
[【OpenCV 例程200篇】93. 噪声模型的直方图](https://blog.csdn.net/youcans/article/details/122795669)  
[【OpenCV 例程200篇】94. 算术平均滤波器](https://blog.csdn.net/youcans/article/details/122834762)  
[【OpenCV 例程200篇】95. 几何均值滤波器](https://blog.csdn.net/youcans/article/details/122834842)  
[【OpenCV 例程200篇】96. 谐波平均滤波器](https://blog.csdn.net/youcans/article/details/122834865)  
[【OpenCV 例程200篇】97. 反谐波平均滤波器](https://blog.csdn.net/youcans/article/details/122835182)  
[【OpenCV 例程200篇】98. 统计排序滤波器](https://blog.csdn.net/youcans/article/details/122839428)  
[【OpenCV 例程200篇】99. 修正阿尔法均值滤波器](https://blog.csdn.net/youcans/article/details/122839469)  
[【OpenCV 例程200篇】100. 自适应局部降噪滤波器](https://blog.csdn.net/youcans/article/details/122839495)

专栏目录

[【OpenCV 例程200篇】15. 图像的加权加法（cv2.addWeight）](https://youcans.blog.csdn.net/article/details/121191534" \t "_blank)

[多张图片截取相同位置相同大小](https://blog.csdn.net/cxy5636917/article/details/124620994" \t "_blank)

[【OpenCV 例程200篇】13. 图像的加法运算(cv2.add)\_小...](https://blog.csdn.net/youcans/article/details/121191440" \t "_blank)

5-30

[【OpenCV例程200篇】13. 图像的加法运算(cv2.add) 欢迎关注『OpenCV 例程200篇』系列,持续更新中 欢迎关注『Python小白的OpenCV学习课』系列,持续更新中 函数cv2.add() 用于图像的加法运算。](https://blog.csdn.net/youcans/article/details/121191440" \t "_blank)

[【OpenCV 例程200篇】06. 像素的编辑(img.itemset)\_you...](https://blog.csdn.net/youcans/article/details/121169212" \t "_blank)

3-15

[【OpenCV 例程200篇】16. 不同尺寸的图像加法 【OpenCV 例程200篇】17. 两张图像的渐变切换 【OpenCV 例程200篇】18. 图像的掩模加法 【OpenCV 例程200篇】19. 图像的圆形遮罩 【OpenCV 例程200篇】20. 图像的按位运算 【OpenCV ...](https://blog.csdn.net/youcans/article/details/121169212" \t "_blank)

[【OpenCV 例程200篇】52. 图像的相关与卷积运算](https://youcans.blog.csdn.net/article/details/121728092" \t "_blank)

[制作多张“像素、通道、大小”相同的图片](https://blog.csdn.net/weixin_33700350/article/details/93156104" \t "_blank)

[【OpenCV 例程200篇】15. 图像的加权加法(cv2.addWeigh...](https://blog.csdn.net/youcans/article/details/121191534" \t "_blank)

4-28

[【OpenCV 例程200篇】15. 图像的加权加法(cv2.addWeight) 欢迎关注『OpenCV 例程200篇』系列,持续更新中 欢迎关注『Python小白的OpenCV学习课』系列,持续更新中 函数cv2.addWeight() 用于图像的加权加法运算。](https://blog.csdn.net/youcans/article/details/121191534" \t "_blank)

[【OpenCV 例程200篇】20. 图像的按位运算\_小白YouCans...](https://blog.csdn.net/youcans/article/details/121244431" \t "_blank)

[opencv python 图像叠加/图像融合/按位操作](https://blog.csdn.net/weixin_33817333/article/details/88766968" \t "_blank)

[OPENCV将图片不相同的两张图片变得大小相同](https://blog.csdn.net/qq_44264934/article/details/106172315" \t "_blank)

[【OpenCV 例程200篇】52. 图像的相关与卷积运算\_小白Yo...](https://blog.csdn.net/youcans/article/details/121728092" \t "_blank)

[【OpenCV 例程200篇】18. 图像的掩模加法\_小白YouCans...](https://blog.csdn.net/youcans/article/details/121244290" \t "_blank)

[图像处理-特征融合：相加、拼接、Attention](https://blog.csdn.net/MengYa_Dream/article/details/124728120" \t "_blank)

[最新发布](https://blog.csdn.net/MengYa_Dream/article/details/124728120" \t "_blank)

[OpenCV对图像进行尺寸变换](https://zhuoqing.blog.csdn.net/article/details/122726752" \t "_blank)

[【OpenCV 例程200篇】94. 算术平均滤波器\_小白YouCans...](https://blog.csdn.net/youcans/article/details/122834762" \t "_blank)

[【OpenCV 例程200篇】16. 不同尺寸的图像加法 【OpenCV 例程200篇】17. 两张图像的渐变切换 【OpenCV 例程200篇】18. 图像的掩模加法 【OpenCV 例程200篇】19. 图像的圆形遮罩 【OpenCV 例程200篇】20. 图像的按位运算 【OpenCV ...](https://blog.csdn.net/youcans/article/details/122834762" \t "_blank)

[【OpenCV 例程200篇】21. 图像的叠加\_小白YouCans的博...](https://blog.csdn.net/youcans/article/details/121265151" \t "_blank)

[【OpenCV例程200篇】21. 图像的叠加 两张图像直接进行加法运算后图像的颜色会改变,通过加权加法实现图像混合后图像的透明度会改变,都不能实现图像的叠加。 实现图像的叠加,需要综合运用图像阈值处理、图像掩模、位操作和图像加法的操作。](https://blog.csdn.net/youcans/article/details/121265151" \t "_blank)

[youcans 的 OpenCV 学习课—4.图像的叠加与混合](https://youcans.blog.csdn.net/article/details/121136047" \t "_blank)

[【目标检测】目标检测中的多尺度检测（Multi-Scale），FPN，RPN](https://yanyx.blog.csdn.net/article/details/108555121" \t "_blank)

[python演示验证图像叠加过程\_在Python中叠加两个相同大小的图像](https://blog.csdn.net/weixin_29023471/article/details/114444583" \t "_blank)

[Python-OpenCV 图像叠加or图像混合加权（cv2.addWeighted）](https://blog.csdn.net/zh_jessica/article/details/77992578" \t "_blank)

[热门推荐](https://blog.csdn.net/zh_jessica/article/details/77992578" \t "_blank)

[Python-OpenCV 图像叠加or图像混合加权实现 函数说明 参数说明 代码示范 图示 Python-OpenCV 图像叠加or图像混合加权实现函数说明cv2.addWeighted(src1, alpha, src2, beta, gamma[, dst[, dtype]]) → dst参数说明 src1 – first input array. alpha – weight of the](https://blog.csdn.net/zh_jessica/article/details/77992578" \t "_blank)

[opencv实现两张图片叠加](https://jackzhang.blog.csdn.net/article/details/113465381" \t "_blank)

[Opencv拼接两张不同尺寸的图像(Python)](https://blog.csdn.net/qq_41917697/article/details/121956901" \t "_blank)

[opencv中实现两幅不同尺寸大小图片的相加](https://blog.csdn.net/muzhiai/article/details/8857899" \t "_blank)

[python opencv 图像叠加\_opencv中图像叠加/图像融合/按位操作的实现](https://blog.csdn.net/weixin_39764487/article/details/110990664" \t "_blank)

[OpenCV的图像加法运算](https://blog.csdn.net/weixin_51571728/article/details/120695443" \t "_blank)

**热门文章**

* [【OpenCV 例程200篇】02. 图像的保存（cv2.imwrite） [https://csdnimg.cn/release/blogv2/dist/pc/img/readCountWhite.png](https://youcans.blog.csdn.net/article/details/121169014) 47608](https://youcans.blog.csdn.net/article/details/121169014)
* [【OpenCV 例程200篇】01. 图像的读取（cv2.imread） [https://csdnimg.cn/release/blogv2/dist/pc/img/readCountWhite.png](https://youcans.blog.csdn.net/article/details/121168935) 10994](https://youcans.blog.csdn.net/article/details/121168935)
* [Python小白的数学建模课-B5. 新冠疫情 SEIR模型 [https://csdnimg.cn/release/blogv2/dist/pc/img/readCountWhite.png](https://youcans.blog.csdn.net/article/details/117932162) 10272](https://youcans.blog.csdn.net/article/details/117932162)
* [Python小白的数学建模课-A3. 12个新冠疫情数模竞赛赛题与点评 [https://csdnimg.cn/release/blogv2/dist/pc/img/readCountWhite.png](https://youcans.blog.csdn.net/article/details/117519025) 9465](https://youcans.blog.csdn.net/article/details/117519025)
* [计算机设计大赛国奖作品\_1. 项目概要 [https://csdnimg.cn/release/blogv2/dist/pc/img/readCountWhite.png](https://youcans.blog.csdn.net/article/details/123948442) 8460](https://youcans.blog.csdn.net/article/details/123948442)

**分类专栏**

[[](https://blog.csdn.net/youcans/category_11851210.html)youcans的OpenCV函数字典](https://blog.csdn.net/youcans/category_11851210.html" \t "_blank)2篇

[[](https://blog.csdn.net/youcans/category_11031563.html)youcans的数学建模课](https://blog.csdn.net/youcans/category_11031563.html" \t "_blank)53篇

[[](https://blog.csdn.net/youcans/category_11490243.html)youcans的图像处理学习课](https://blog.csdn.net/youcans/category_11490243.html" \t "_blank)11篇

[[](https://blog.csdn.net/youcans/category_11459626.html)youcans的OpenCV例程](https://blog.csdn.net/youcans/category_11459626.html" \t "_blank)204篇

[[](https://blog.csdn.net/youcans/category_11031564.html)Python小白的项目实战](https://blog.csdn.net/youcans/category_11031564.html" \t "_blank)34篇