




python如何实现找图_利用python实现简单的图片隐写

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隐写术 (Steganography) : 是关于信息隐藏, 即不让计划的接收者之外的任何人知道信息的传递事件 (而不只是信息的内容) 的一门技巧与科学

1、随便找两张图





欢迎你找到该群，接下来你只要提交flag{}括号内的字符串即可入群。入群后请遵守群规。

富强民主文明和谐自由平等公正法治爱国敬业诚信友善

2、利用python实现将图ctf.png 隐藏到图1539.jpg中

python:

```
from PIL import Image from skimage import color import numpy as np import matplotlib.pyplot as plt import math

img = np.array(Image.open('1539.jpg'))

mark = np.array(Image.open('ctf.png'))

rows, cols, dims = mark.shape
for i in range(0, dims):
    for j in range(0, rows * 2):
        for k in range(0, cols * 2):
            img[j, k, i] = img[j, k, i] & 252

for i in range(0, dims):
    for j in range(0, rows):
        for k in range(0, cols):
            img[2*j, 2*k, i] = img[2*j, 2*k, i] + (mark[j, k, i] & 192) // 64
            img[2*j, 2*k+1, i] = img[2*j, 2*k+1, i] + (mark[j, k, i] & 48) // 16
            img[2*j+1, 2*k, i] = img[2*j+1, 2*k, i] + (mark[j, k, i] & 12) // 4
            img[2*j+1, 2*k+1, i] = img[2*j+1, 2*k+1, i] + (mark[j, k, i] & 3)

img = Image.fromarray(img)

img.save('C:\1539_with_ctf.png')
```

得:





3、从图1539_with_ctf.png中提取隐藏的图ctf.png

python:

```
from PIL import Image
from skimage import color
import numpy as np
import matplotlib.pyplot as plt
import math

imgwmark=np.array(Image.open('1539_with_ctf.png'))

result=imgwmark

rows,cols,dims=imgwmark.shape

rows=rows//2
cols=cols//2

for i in range(0,dims):
    for j in range(0,rows*2):
        for k in range(0,cols*2):

            imgwmark[j,k,i]=imgwmark[j,k,i]&3

for i in range(0,dims):
    for j in range(0,rows):
        for k in range(0,cols):

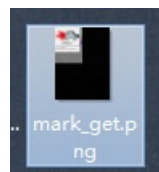
            result[j,k,i]=imgwmark[2*j,2*k,i]*64+imgwmark[2*j,2*k+1,i]*16

            +imgwmark[2*j+1,2*k,i]*4+imgwmark[2*j+1,2*k+1,i]

mark_get=Image.fromarray(result)

mark_get.save('mark_get.png')
```

得:





注：本段代码需要用到python的pillow和skimage库，skimage库的详细安装见
<http://www.cnblogs.com/xdjun/p/7874794.html>

-----分割线-----

ps:萌新一枚，本文纯为学习笔记，以防某日犯傻忘记--。如有不妥处，望大佬们赐教~

原文地址：<http://www.cnblogs.com/xdjun/p/7875048.html>