

# 色彩科學導論與應用

## 色彩轉移練習

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Implement the RGB color transfer algorithm using the code provided in the url link

[https://github.com/jrosebr1/color\\_transfer](https://github.com/jrosebr1/color_transfer)

1. Using a standard Kodak image database containing 25 images. You can select any two of images within this database as the source and target image, respectively, and produce the color transfer results. Please submit FOUR cases and please **STRICTLY** follow the naming rules.

FOUR CASES:

- Input: four source images; for example; sou1.bmp, sou2.bmp, ..., sou4.bmp
- Input: four target images; for example; tar1.bmp, tar2.bmp, ..., tar4.bmp
- Output: four color transfer images with the name entitled ult1.bmp, ult2.bmp, ..., ult4.bmp

In addition, you need to submit another two cases, where source images and target images are selected by yourselves. The naming rules are as below:

TWO CASES:

- Input: two source images; for example; sou5-self.bmp, sou6-self.bmp.
- Input: two target images; for example; tar5-self.bmp, tar6-self.bmp.
- Output: two color transfer images with the name entitled ult5-self.bmp, ult6-self.bmp.

You can download the Kodak images, if you prefer, using the following url link

<http://r0k.us/graphics/kodak/>

Please submit the following materials. Please do not compress your materials; rather please submit each file.

1. your python program. for example, 學號-03-color-transfer.py
2. SIX cases, where each case has three images. A total of 18 images.

For example, three images in the first case you submit will be as follows:

sou1.bmp

tar1.bmp

ult1.bmp.

Surely, three images in the second case you submit will be as follows:

sou2.bmp

tar2.bmp

ult2.bmp.

In another example, three images submitted in the **fifth** case using your own images will be as follows:

sou**5**-self.bmp

tar**5**-self.bmp

ult**5**-self.bmp.

Obviously, three images in the **sixth** case you submit will be as follows:

sou**6**-self.bmp

tar**6**-self.bmp

ult**6**-self.bmp.