Projects

#11

colorSpaceConv(f, 'method')

(a) Write a function **g=colorSpaceConv(f, 'method')** that converts color image f to the model designated by method, which is a string with the possible values: 'rgb2cmy' e 'cmy2rgb'.

(b) Read the RGB image **sunflower.tif**. Use this image to test your function;You can do this by inputting the RGC image, converting it either to CMY, converting back, and then diplaying, as na image, the difference between the original and the resultof the bac-Ward convertion;

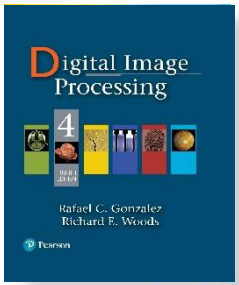
Projects

#11

colorSpaceConv(f, 'method')

(a) Write a function **g=colorSpaceConv(f, 'method')** that converts color image f to the model designated by method, which is a string with the possible values: 'rgb2cmy', 'cmy2rgb', 'rgb2cmyk' e cmyk2rgb;

(b) Read the RGB image **sunflower.tif**. Use this image to test all four conversion options inyour function;You can do this by inputting the RGC image, converting it either to CMY or CMYK, converting back, and then diplaying, as an image, the difference between the original and the resultof the back-ward conversion;



Projects

What should be uploaded?

1. m file (commented);
2. Input and processed Images
3. conclusions.

Material de suporte CMYK MODEL

K=min(C,M,Y)

- Se K=1, então nós temos um preto puro, com nenhuma contribuição de cores. Assim, define-se que:

C=0;

M=0

Y=0

- Do contrário,

C=(C-K)/(1-K);

M=(M-K)/(1-K);

Y=(Y-K)/(1-K);

- Assume-se que todos os valores estão na faixa de [0,1]

Material de suporte CMYK MODEL

- A conversão de CMYK de volta para CMY são dadas pelas seguintes expressões:

$$C=C*(1-K)+K$$

$$M=M*(1-K)+K$$

$$Y=Y*(1-K)+K$$

Material de suporte:

- CMYK MODEL
- K=min(C,M,Y);
- Se K=1, então nós temos um preto puro, com nenhuma contribuição de cores. Assim, define-se que:
- C=0;
- M=0
- Y=0
- Do contrário,
- C=(C-K)/(1-K);
- M=(M-K)/(1-K);