

Color Transfer between Images

Experimental results

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source = 原圖

reference = 參考圖

result = 把參考圖的色調轉到原圖的結果

流程：

把原圖&參考圖， RGB轉LAB

計算原圖Lab的平均, 原圖Lab的標準差

計算參考圖Lab的平均, 參考圖Lab的標準差

$$L_{\text{new}} = \frac{L_{\text{reference}} - \sigma}{L_{\text{source}} - \sigma} (L_{\text{source}} - L_{\text{source-}\mu}) + L_{\text{reference-}\mu}$$
$$a_{\text{new}} = \frac{a_{\text{reference}} - \sigma}{a_{\text{source}} - \sigma} (a_{\text{source}} - a_{\text{source-}\mu}) + a_{\text{reference-}\mu}$$
$$b_{\text{new}} = \frac{b_{\text{reference}} - \sigma}{b_{\text{source}} - \sigma} (b_{\text{source}} - b_{\text{source-}\mu}) + b_{\text{reference-}\mu}$$

LAB轉RGB

完畢

source



reference



result



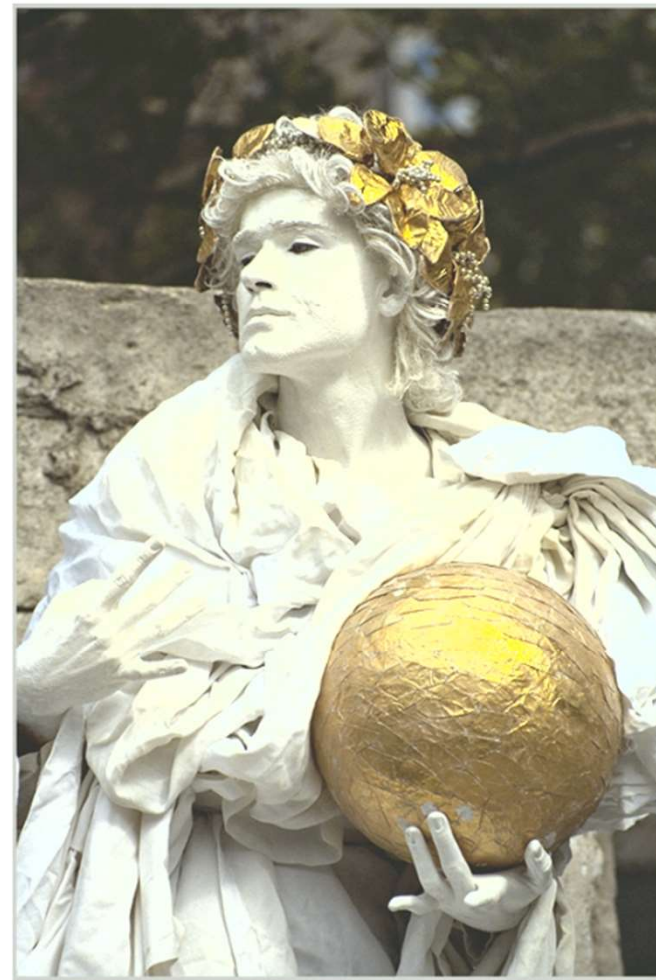
source



reference



result



source



reference



result



source



reference



result



source



reference



result



source



reference



result

