Assignment 2

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1 Introduction

In this assignment, we are expected to make color transfer between with both whole and split images. And it can be done using the formula given in the pdf.

2 Experiment

2.1 Part 1

In this part, we are expected to make color transfer using source and target images. First, reading the images and converting their channels from BGR to LAB. Second, finding LAB means and standart deviations for all images. Finally, using the formula given in the assignment pdf.

2.2 Part 2

In this part, we are expected to divide the image into equal parts and look at the differences using Sum of squared differences (SSD) and Normalized cross-correlation (NCC). And, additionally I wanted to look at differences multiplying them. I divided images into 4 (2x2) to 25 (5x5) equal parts, and applied the methods I mentioned a sentence ago. Then, I calculated the mean diff looking at the methods results and, made a color transfer the more correlated ones. Then concatenate them and save different directories.

3 Conclusion

It was a good experiment for me as a student. I have learned how to transfer color of images, but the most hard part for me is concatenating the partial images, it stole my hours because it is complicated and gave lots of errors.

Table 1: Methods

Method Name	Input(s)	Output(s)	Info
SSD	source images, target images	16 partial image for every image	It looks squared differen
COR	source images, target images	16 partial image for every image	it calculates sum of mult
SSD and COR	source images, target images	16 partial image for every image	multiplies the two metho