#### Group-Theme Recoloring for Multi-Image Color Consistency

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(Supplementary Material)

#### Supplementary Material

- This supplementary material contains three parts:
  - Part 1 is the instruction which gives to the Photoshop expert to manually produce the results for comparison in our user study.
  - Part 2 is to show several examples of our user study.
  - Part 3 is to show an example of our failure case

# Part 1 - Instruction for expert

#### Goal

The goal of this exercise is to use Photoshop to modify a set of individual images such that the images share a consistent look and feel in terms of colors. You are free to do this however you like in Photoshop.

This document provides two examples of before and after.

#### **Your Tasks**

- Modify a set of images to appear color consistent.
- The modified images should look natural.
  Avoid modifying the images such that they only have a single monotone color.
- Please refer to some examples below for reference

#### Requirements

- Use Photoshop to complete the above tasks for 10 sets of images.
- Save the output images when you are done.
- Record the total spending time for each set of images.
- Do a video recording of at least one example so we can see how you produced your results.

## Example 1: Input















## Example 1: Output















## Example 2: Input















## Example 2: Output















# Part 2 - Examples from our user study

## Example 1: Input













## Example 1: Expert













## Example 1: Ours













## Example 1: Pitie et al.













<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

#### Example 1: Reinhard et al.













<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

#### Example 1: Xiao and Ma













<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

#### Example 1: Nguyen et al.













<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

## Example 1: Park et al.













## Example 2: Input













## Example 2: Expert













## Example 2: Ours













#### Example 2: Pitie et al.



<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

#### Example 2: Reinhard et al.



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#### Example 2: Xiao and Ma



<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

#### Example 2: Nguyen et al.



<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

## Example 2: Park et al.













## Example 3: Input













## Example 3: Expert













## Example 3: Ours













#### Example 3: Pitie et al.













<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

#### Example 3: Reinhard et al.













<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

#### Example 3: Xiao and Ma













<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

#### Example 3: Nguyen et al.













<sup>\*</sup>The images with an (R) denote they are the one used as the reference image.

## Example 3: Park et al.













#### Part 3 – Failure case

#### Input











#### Output without user adjustment











<sup>\*</sup>The skin tone in the fifth image turns to green color that may cause unwanted result

#### Output with user adjustment









