

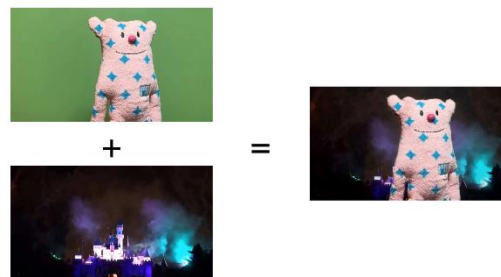
COMP4431 Mini Project Description

Group 12 – V2 Chroma Key

I. Description

The chroma key effect, more commonly known as the green screen, is the process to shoot videos so that the foreground can be easily combined with a background video or image. This technique is commonly used in movies or weather forecast broadcasts.

In this project, we will use the chroma key technique to combine foreground with a background video. An example is shown in the figure below.



The procedure of the program is 1) Input the foreground and background video; 2) Identify the screen in the foreground video by calculating its pixel similarity with the color key; 3) Apply threshold value to separate the frame into foreground and background; 4) Combine the background video with the foreground video.

This project of using the chroma key technique to combine foreground video with a background video can be found in:

https://github.com/dmaribowo/comp4431_chroma-key-project

II. Functionalities

The following functionalities will be added to the project:

- An upload box for the user to upload the foreground and background videos
- The user can adjust the color key threshold (0.1 steps)
- A toggle switch to apply blur on the foreground video
- The user can adjust the motion blur effect
- A button to turn on and off the Chroma key effect
- The user can upload images as the background
- When an image is used as the background, a selection box is added to select some image processing (e.g., blur and greyscale)