Project 1 Writeup

Instructions

- Provide an overview about how your project functions.
- Describe any interesting decisions you made to write your algorithm.
- Show and discuss the results of your algorithm.
- Feel free to include code snippets, images, and equations.
- List any extra credit implementation and result (optional).
- Use as many pages as you need, but err on the short side.
- **Please make this document anonymous.**

Project Overview

This project is designed to combine two distinct images into one image, which looks more like one image from a distant location and the other image from a closer location. The combined image is a hybrid image generated after summing a low pass filtered version of a first image and a high pass filtered version of a second image.

Implementation Detail

In order for the program to be able to deal with both grey scale image and colored image, I created a boolean variable to check the dimension of image. When the input image is grey scale image, then the program loops through each row and column and thus goes through two for loops. On the other hand, when the input image is colored, the program needs to go through each of three color channel as well and therefore goes through three for loops.

Result

1. Result 1 is a success.(Figure 1, Top) Goku has low frequency and Bejita has high frequency.
2. Result 2 (Figure 1, middle) is a success. Messi has low frequency and Ronaldo has high frequency.

3. Result 3 (Figure 1, bottom) used the same images as result 2 except I swapped high/low frequency images

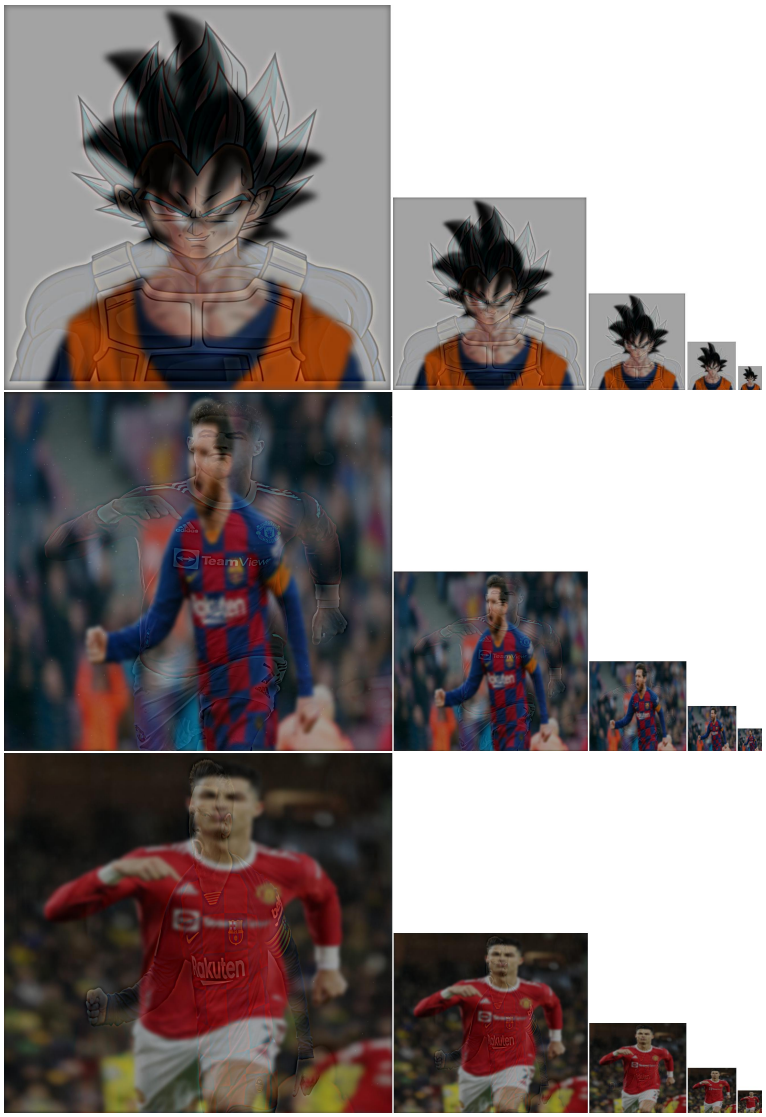

Figure 1: