Computer Vision (Spring 2021) Problem Set #1

First Name Last Name Email Address

1a. Interesting Images





Image 1 - ps1-1-a-1

Image 2 - ps1-1-a-2

4d: Difference Image



ps1-4-d-1

5a: Noisy Green Channel



ps1-5-a-1

5b: Noisy Blue Channel



ps1-5-b-1

6a. Discussion

Between all color channels, which channel, in your opinion, most resembles a gray-scale conversion of the original. Why do you think this? Does it matter for each respective image? (For this problem, you will have to read a bit on how the eye works/cameras to discover which channel is more prevalent and widely used)

I think my answer is ...

6b. Discussion

What does it mean when an image has negative pixel values stored? Why is it important to maintain negative pixel values?

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I think
my answer
is ...
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6c. Discussion

In question 5, noise was added to the green channel and also to the blue channel. Which looks better to you? Why? What sigma was used to detect any discernible difference?

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I think my answer is ...
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7a: Hybrid Images



ps1-7-a-1

7b. Hybrid Images

Explain how the cutoff-frequency impacts the final hybrid image

I think my answer is ...