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CSCI 431

HW02

Abstract

This assignment explores the different color channels in images using MatLab and using different methods to create computer-generated art using our self-portraits.

Questions

5.

6. To generate the picture above, I first divided the image into four equal quadrants. Then, I did a different rotation to the quadrants on each channel: the red, clockwise, the green, nothing, the blue, counterclockwise. Then, using the provided median smoothing across random blocks, I smoothed out each channel. From there, I recombined all the channels back into one image and slightly increased the blue and green channels to be displayed more.

Conclusions and Observations

Through this assignment, I've learned different types of smoothing. Depending on what sections one is smoothing out, different results can come out. Using random block smoothing can generate some interesting looking art, like above. If you want a more organized smoothing, using convolution can smooth out noises from hair strands or other facial irregularities. This goes line by line, pixel by pixel to average out the result.