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### Reflection Journal: J02

It's surprising how computers see colors. I didn't know computers used matrices to see. It's astonishing how when the image colors are separated, the softness or intensity of the color, as in the square, no matter red, blue, or green, but when it's whole, only the intense color shows. The mathematical operations, such as mean, median, and Gaussian filter, are all smoothing filters, and they affect visual effects by controlling noise, sharpness, etc. I think the histogram and the analysis part were the most challenging to understand because they were new charts, and I needed to understand the numbers fully. Today's lab activities are connected to Nano Banana by showing us how it combines many simple operations to create complex effects. One real-world application we discussed was the use of smartphones, web cameras, and social media applications. I think it's just better cameras and digital work. I'm thinking of all the CGI in movies and how that plays a part in image effects. I like the kernel aspect, smoothing images. I've done some generative AI courses, and the way users can get the AI to work smoothly or detect imagery with words is connected. It hasn't changed my mind, but it gave me a better and broader range of information to refer to. There have been terms unfamiliar to us. In my opinion, the lab, although I will admit that I need a deeper understanding. One of the main questions I have is how to determine the value of the matrices. I understand that zero is black and 255 is white, but I'm not sure exactly how to convert it to RGB.