

I. Relation between Image and Matrix

I-a. swith RGB channel with each other



I-b. add operation



Add different kinds of noise(Gaussian, salt&pepper and speckle from left to right) to the original picture.

I-c. multiply operation



Value is amplified as $\times 1$, $\times 2$, $\times 3$, $\times 4$ times from left to right.

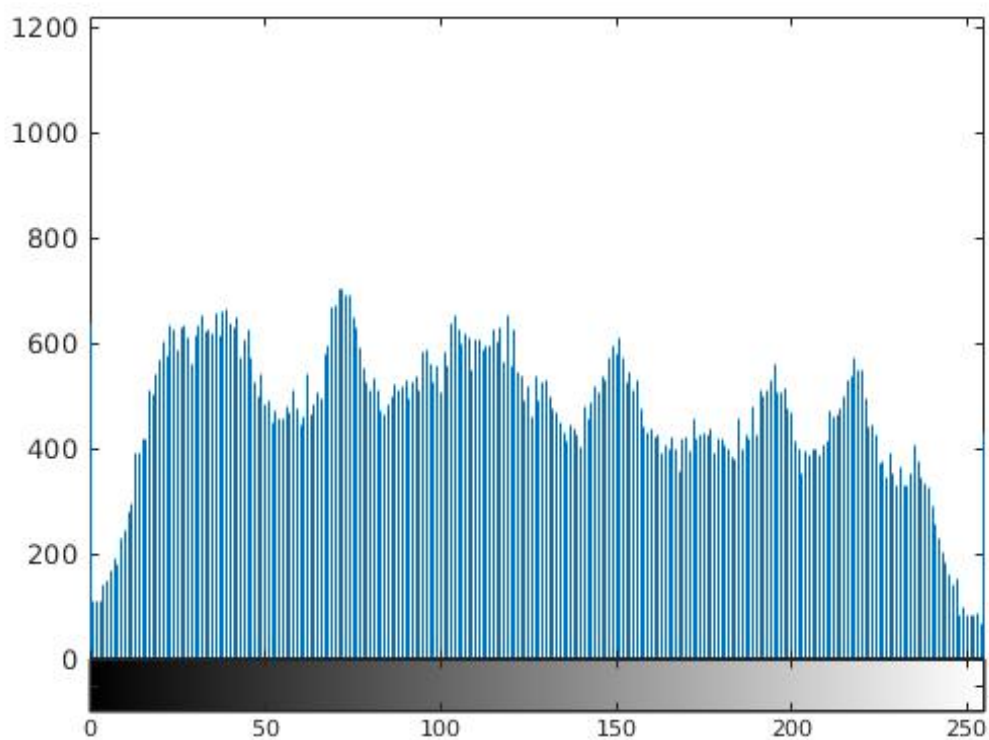
I-d. rotate operation



Rotate the matrix along with the figure.

II. Global and Local Traits

II-a. histogram



II-b. Fourier transform



Figure 1: fftshift

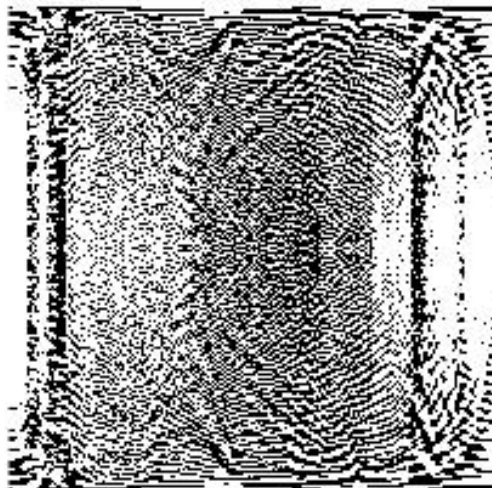


Figure 2: fft

This result is got by transforming the red channel.

II-c. filter

Process the picture in terms of the green channel.

III. Basic Operation

III-a. divide



Figure 3: threshold=5

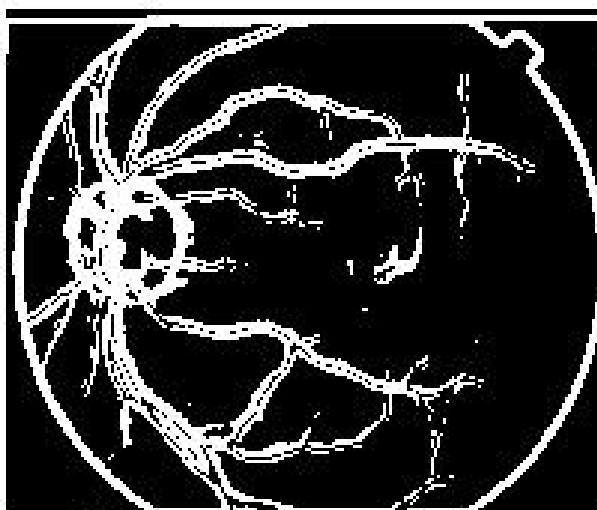


Figure 4: threshold=10

III-b fix



Figure 5: before



Figure 6: after