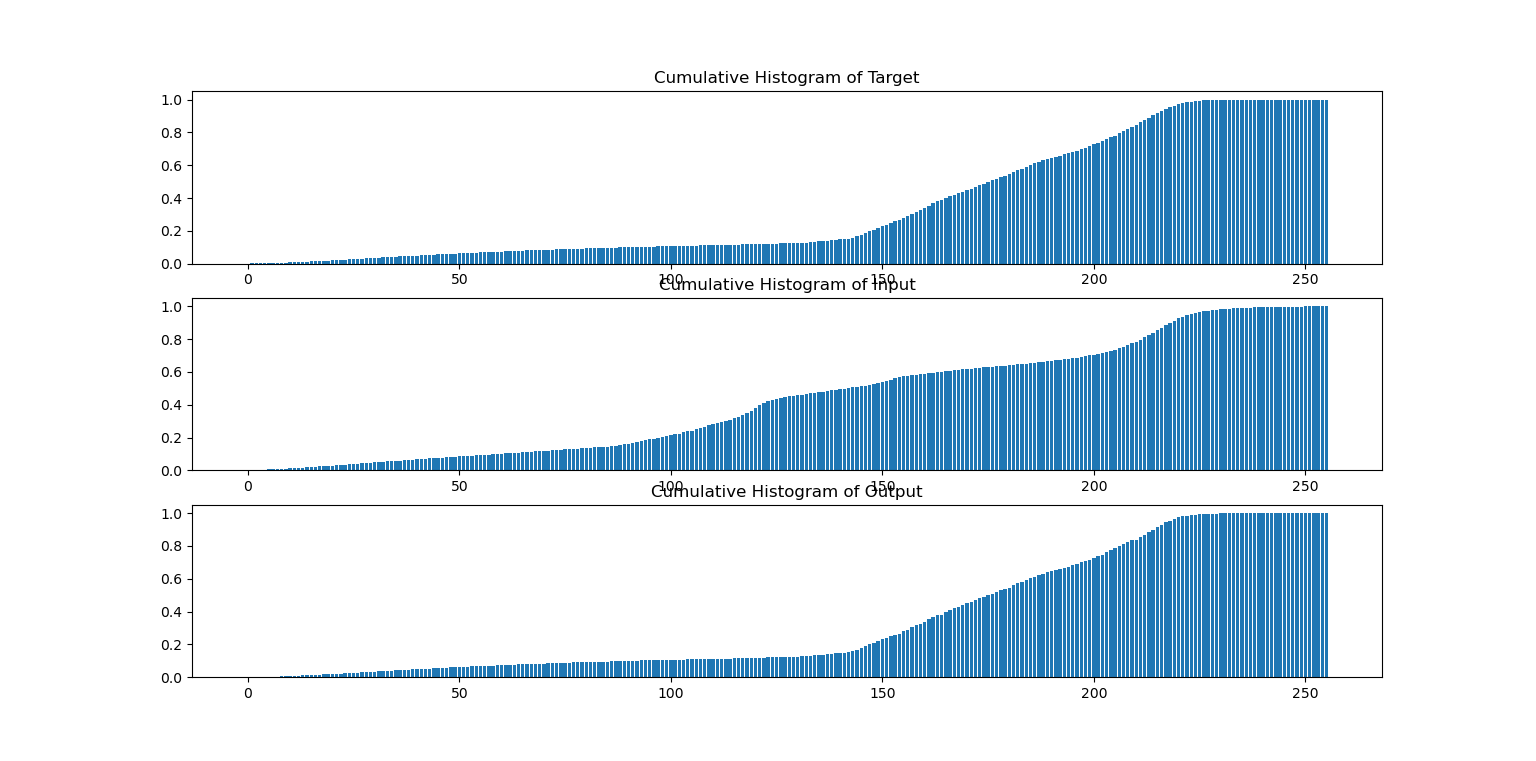
**Histogram Specification**



**Fig. 2** Input Image

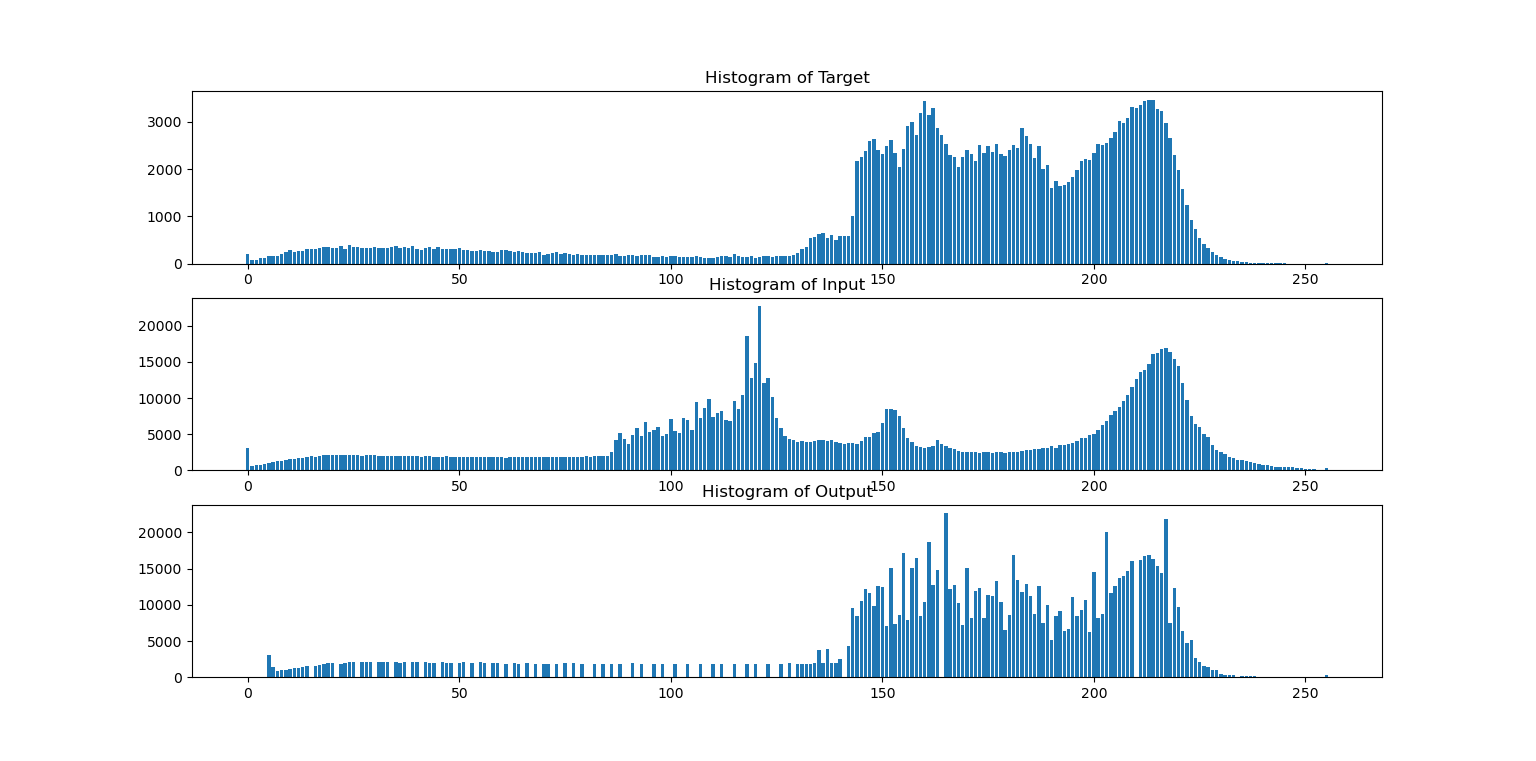
**Fig. 3** Output Image

**Fig. 1** Target Image



**Fig. 4** Cumulative Histogram of three images

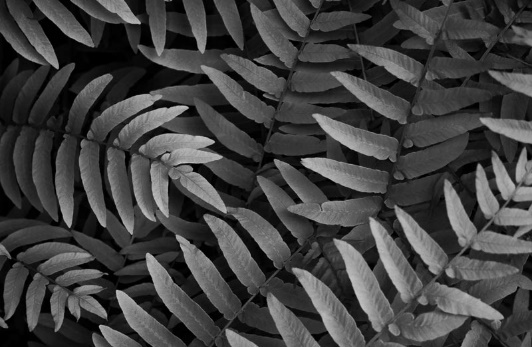
**Fig. 5** Histogram of three images



Spike

Gap

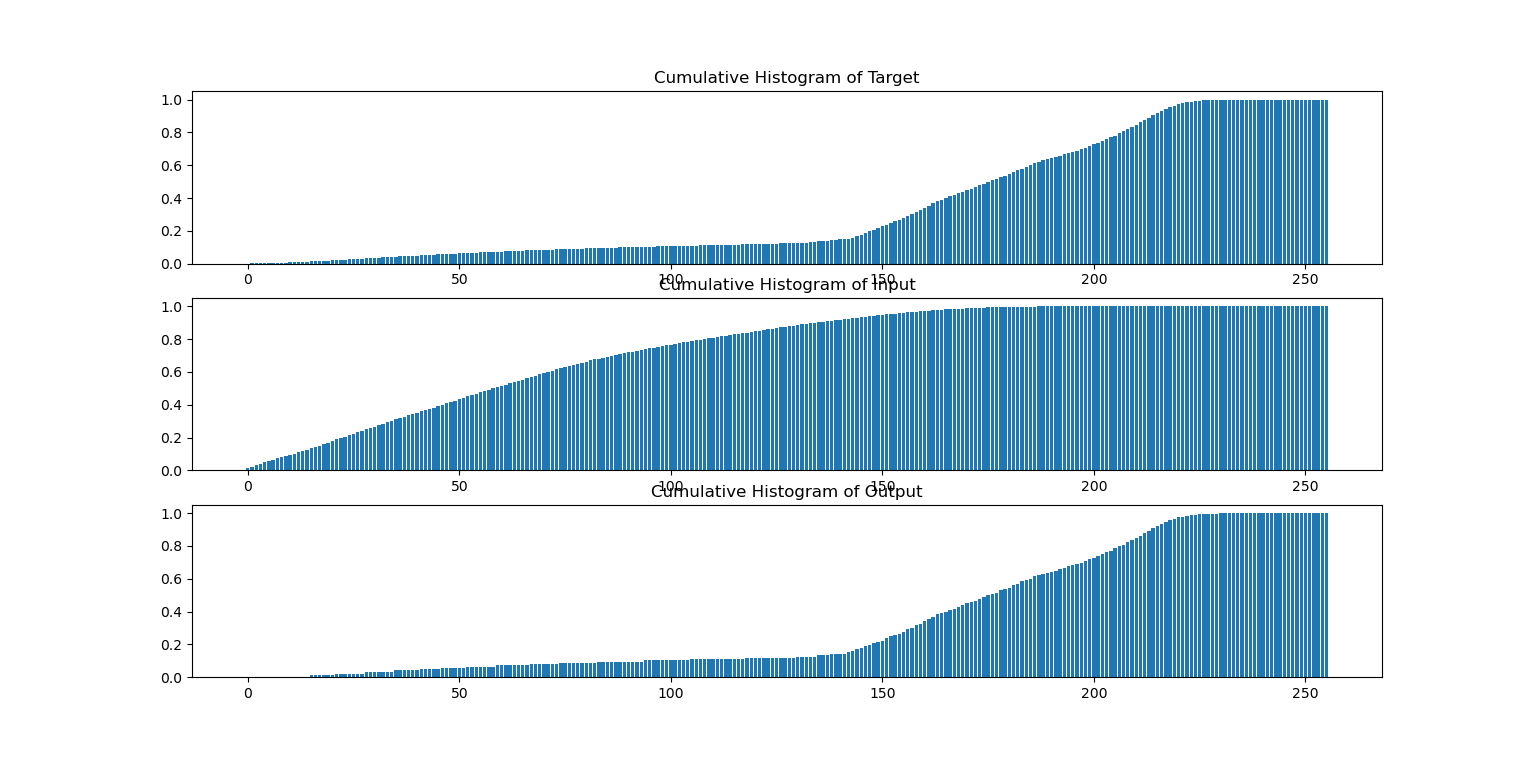
From Fig.4 shown that cumulative histogram of output image is like cumulative histogram of target image and Fig.5 shown that histogram of output image is like histogram of target image. Histogram of output image has gap and spike.



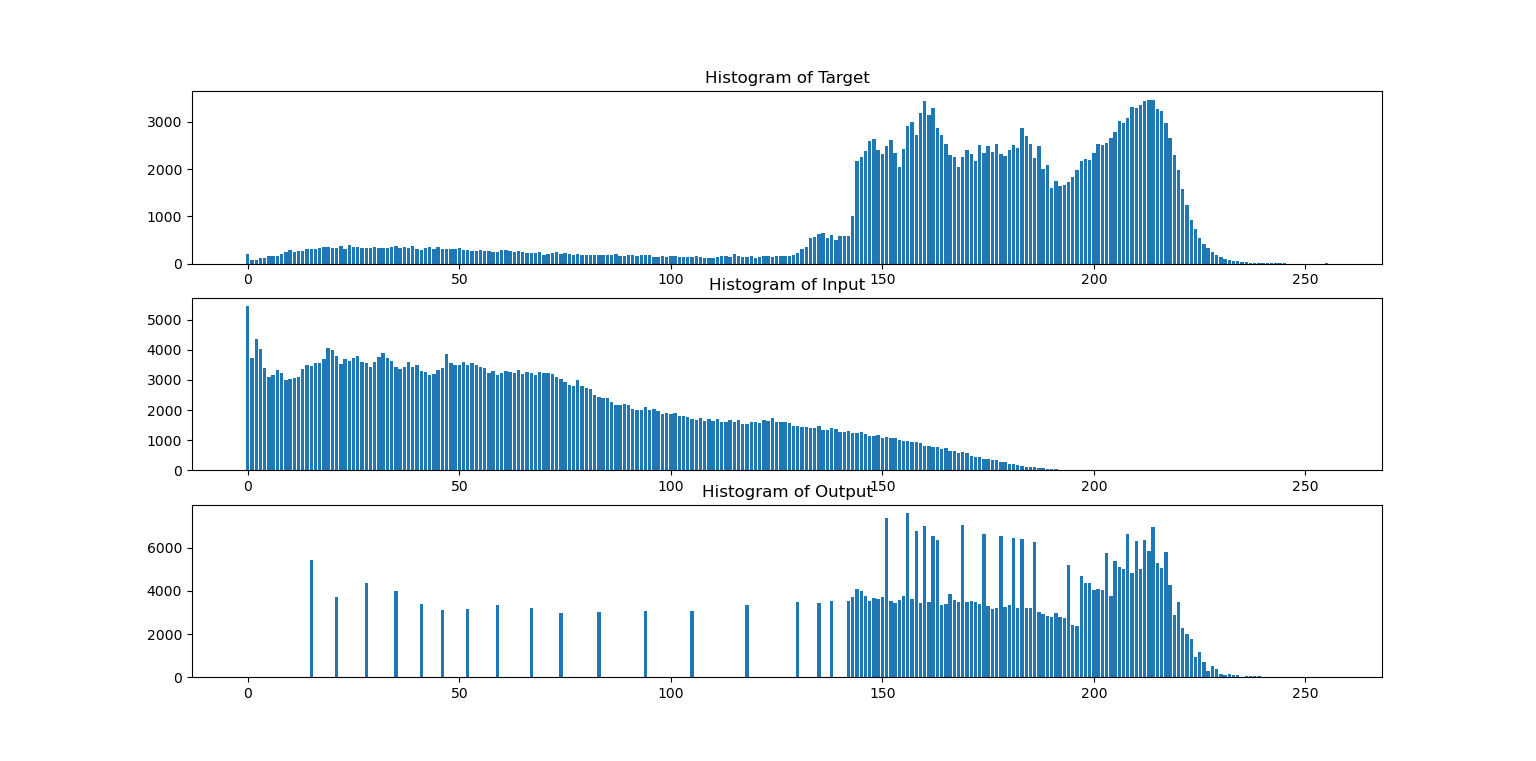
**Fig. 6** Target Image

**Fig. 7** Input Image

**Fig. 8** Output Image



**Fig. 9** Cumulative Histogram of three images



Spike

Gap

**Fig. 10** Histogram of three images

From Fig.9 shown that cumulative histogram of output image is like cumulative histogram of target image and Fig.10 shown that histogram of output image is like histogram of target image. Histogram of output image has gap and spike.

**Filter**

* **Box**

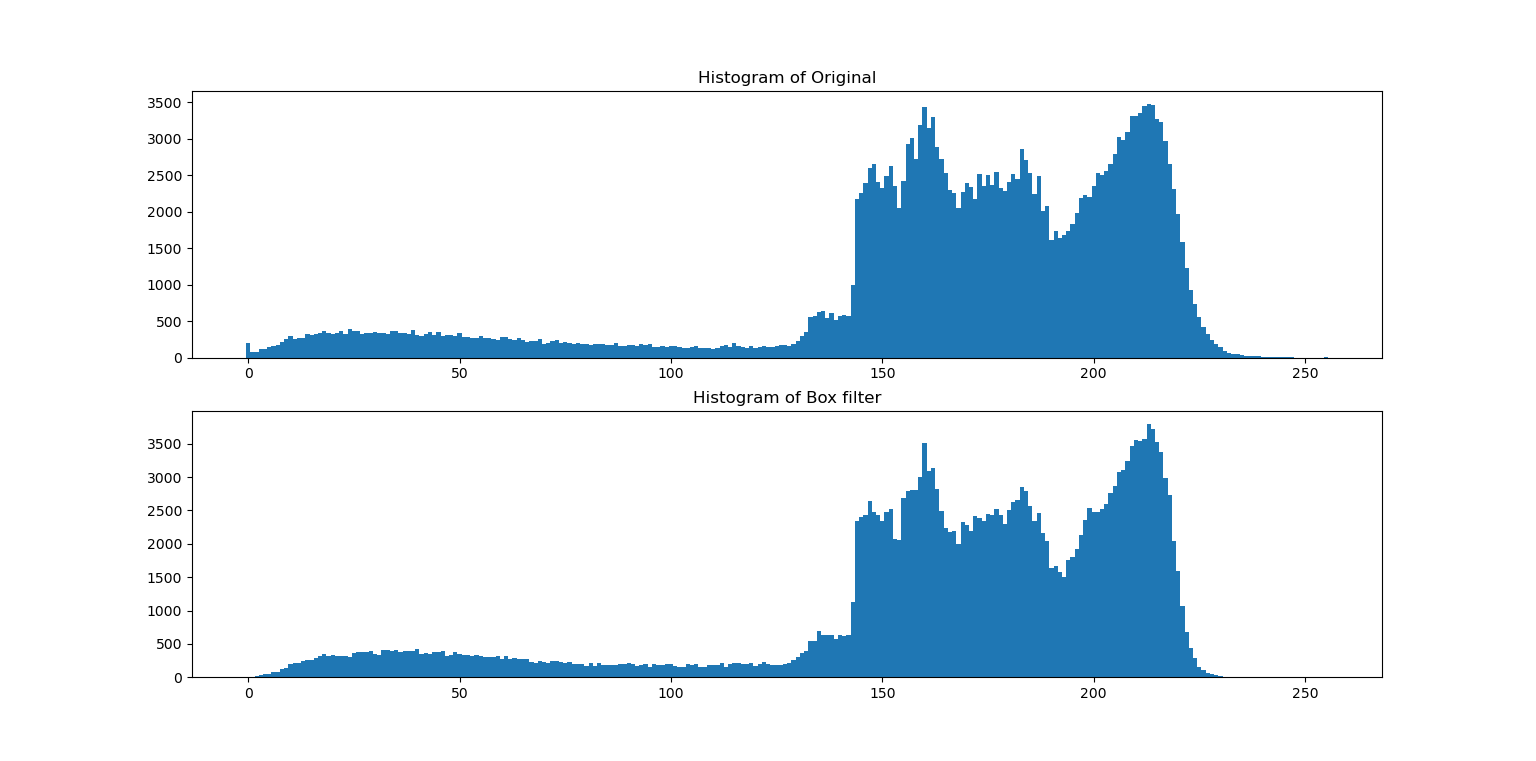


**Fig.11** Original Image

**Fig. 12** Filter Image



**Fig. 13** Histogram of original image and filter image



I chose Box coefficient matrix =  From Fig. 12 shown that histogram of filter image is more blur than original image. Fig. 13 shown that the histogram of filter image is similar to original image

* **Gaussian**

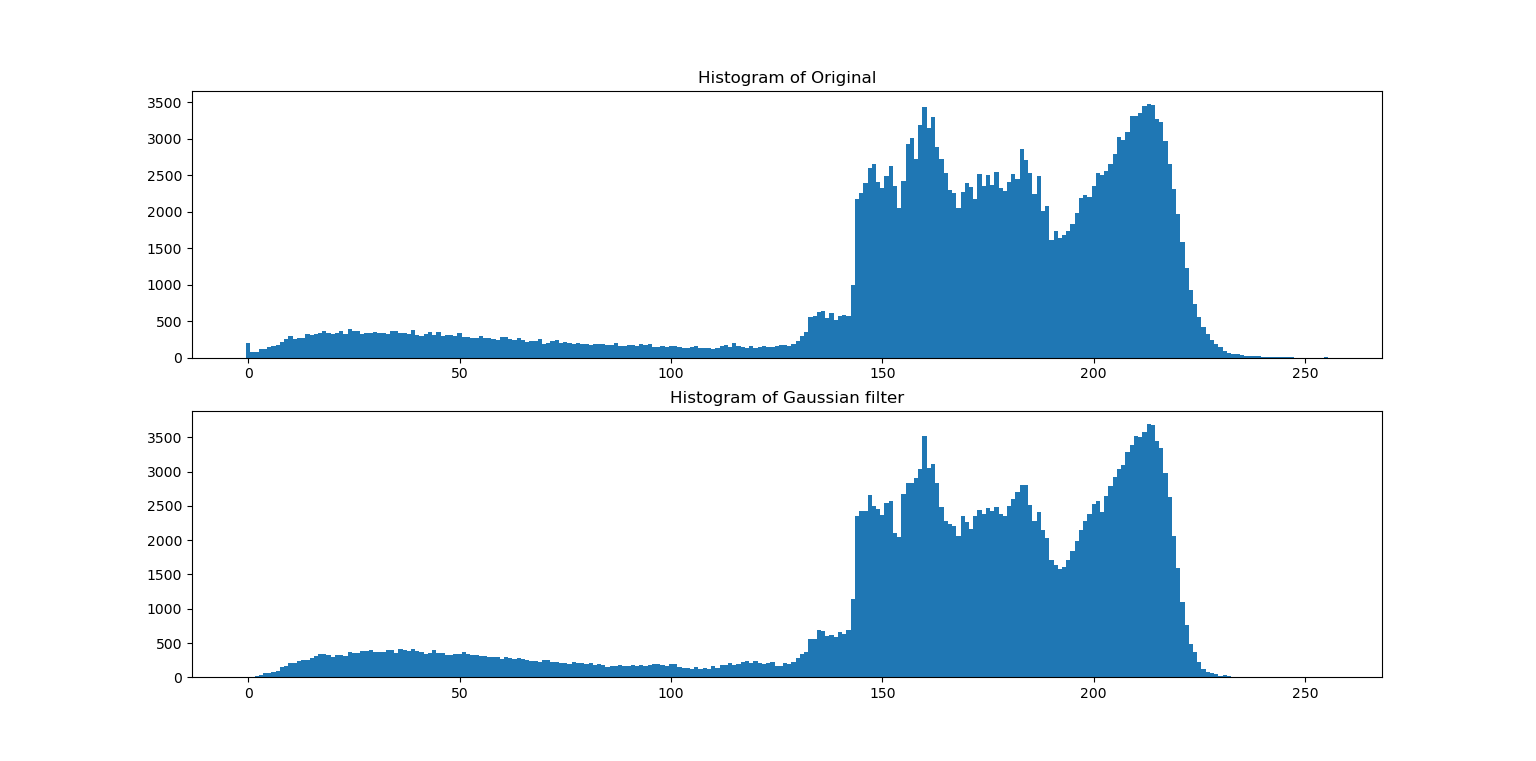


**Fig.14** Original Image

**Fig. 15** Filter Image



**Fig. 16** Histogram of original image and filter image



I chose Gaussian coefficient matrix =  From Fig. 15 shown that histogram of filter image is more blur than original image. Fig. 16 shown that the histogram of filter image is similar to original image

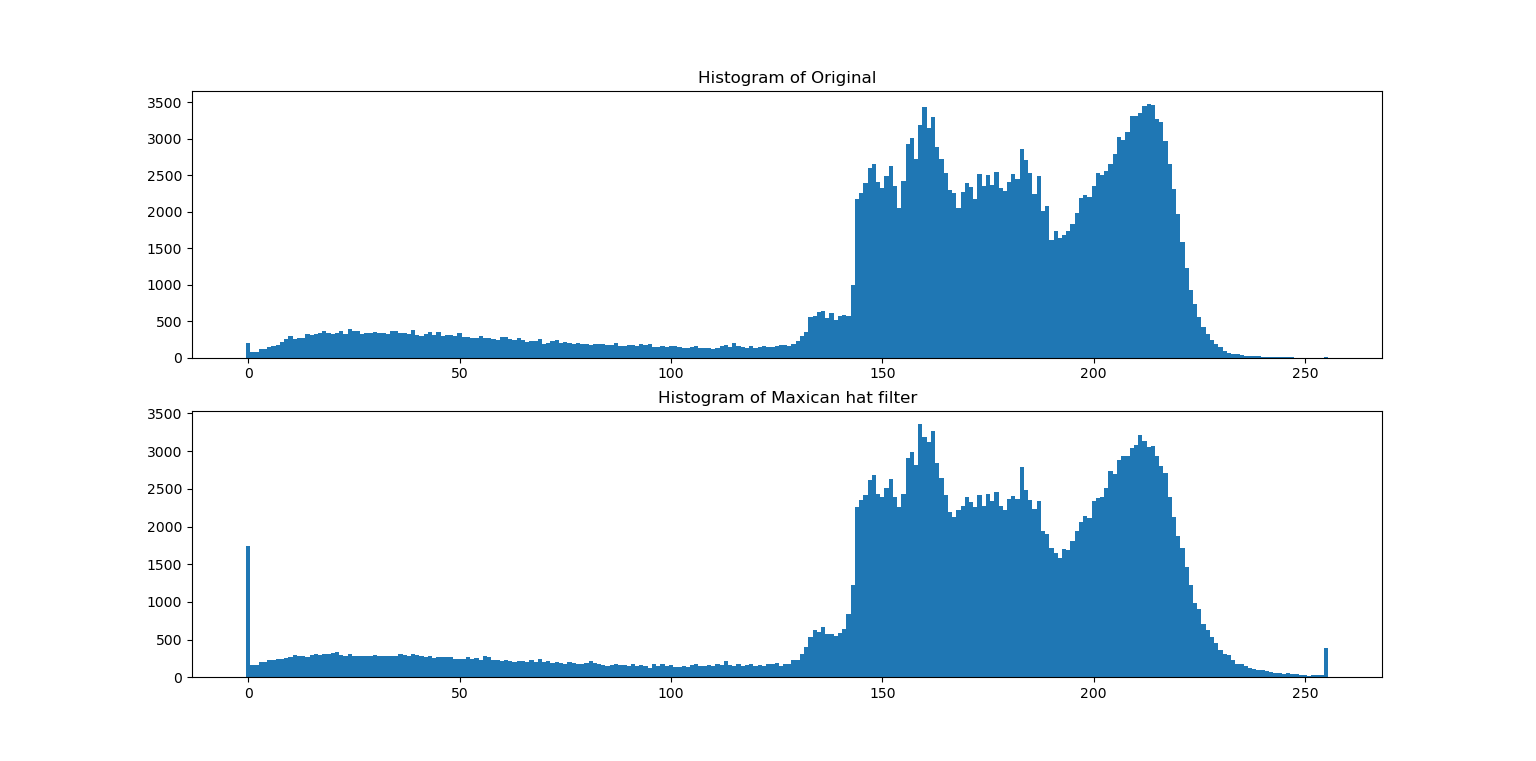
* **Maxican hat**



**Fig.17** Original Image

**Fig. 18** Filter Image





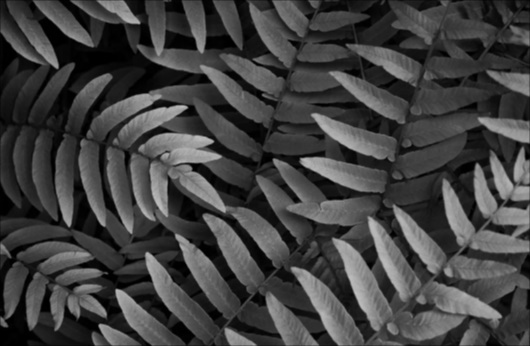
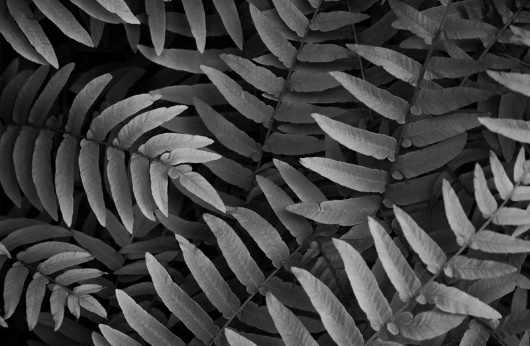
**Fig. 19** Histogram of original image and filter image

I chose Maxican hat coefficient matrix = From Fig. 18 shown that histogram of filter image is more sharp than original image. Fig. 19 shown that the histogram of filter image is similar to original image

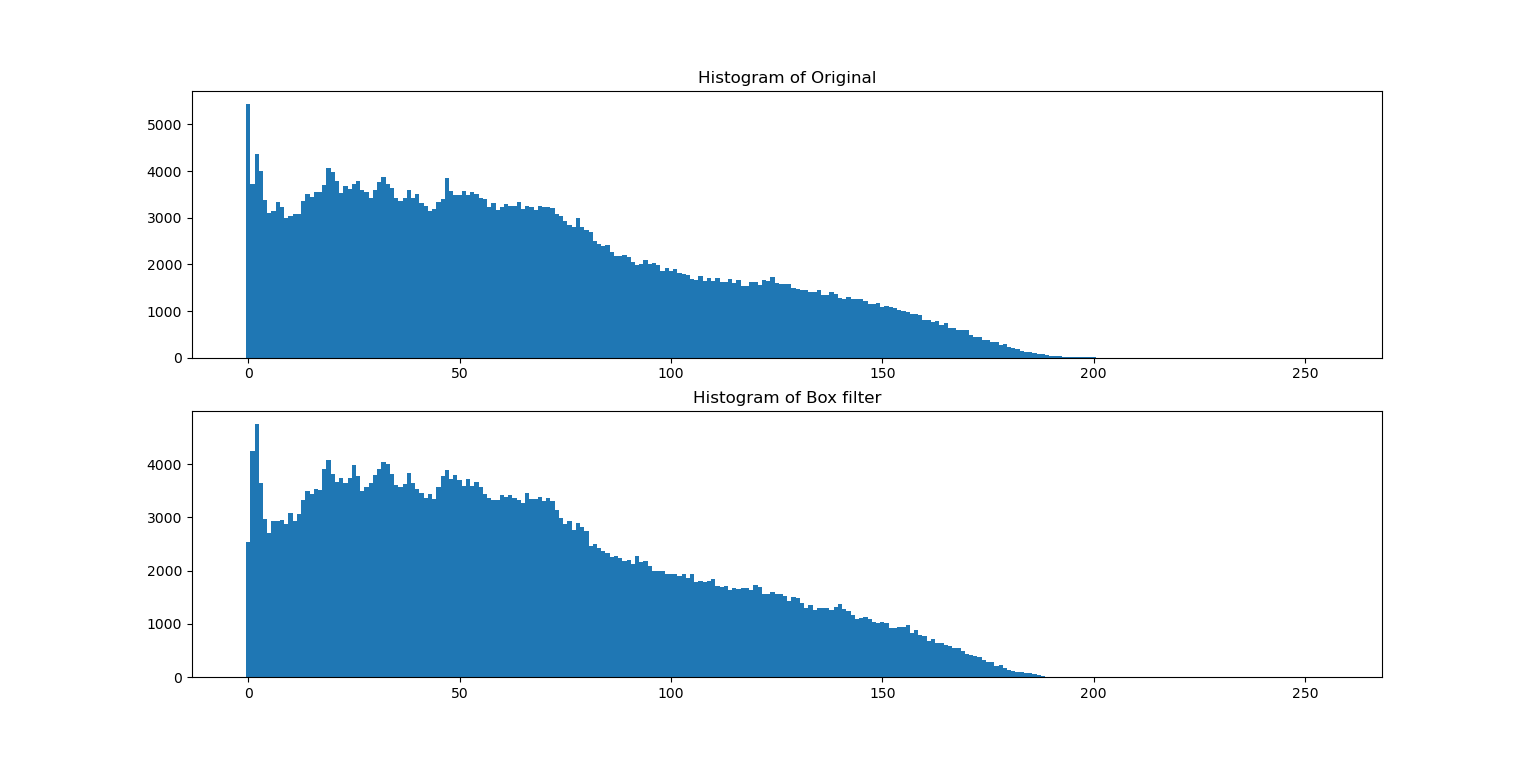
* **Box**

**Fig.20** Original Image

**Fig. 21** Filter Image



**Fig. 22** Histogram of original image and filter image

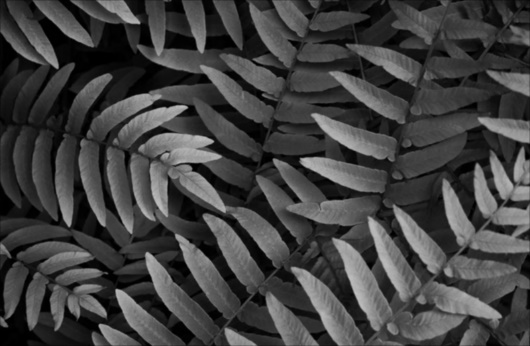
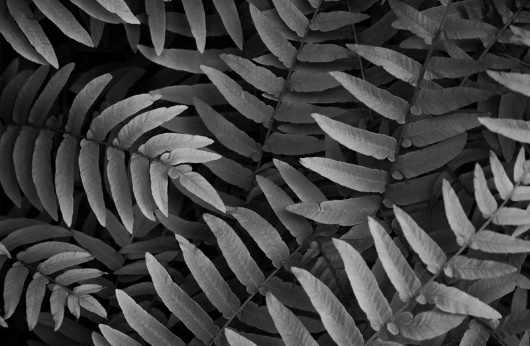


I chose Box coefficient matrix =  From Fig. 21 shown that histogram of filter image is more blur than original image. Fig. 22 shown that the histogram of filter image is similar to original image

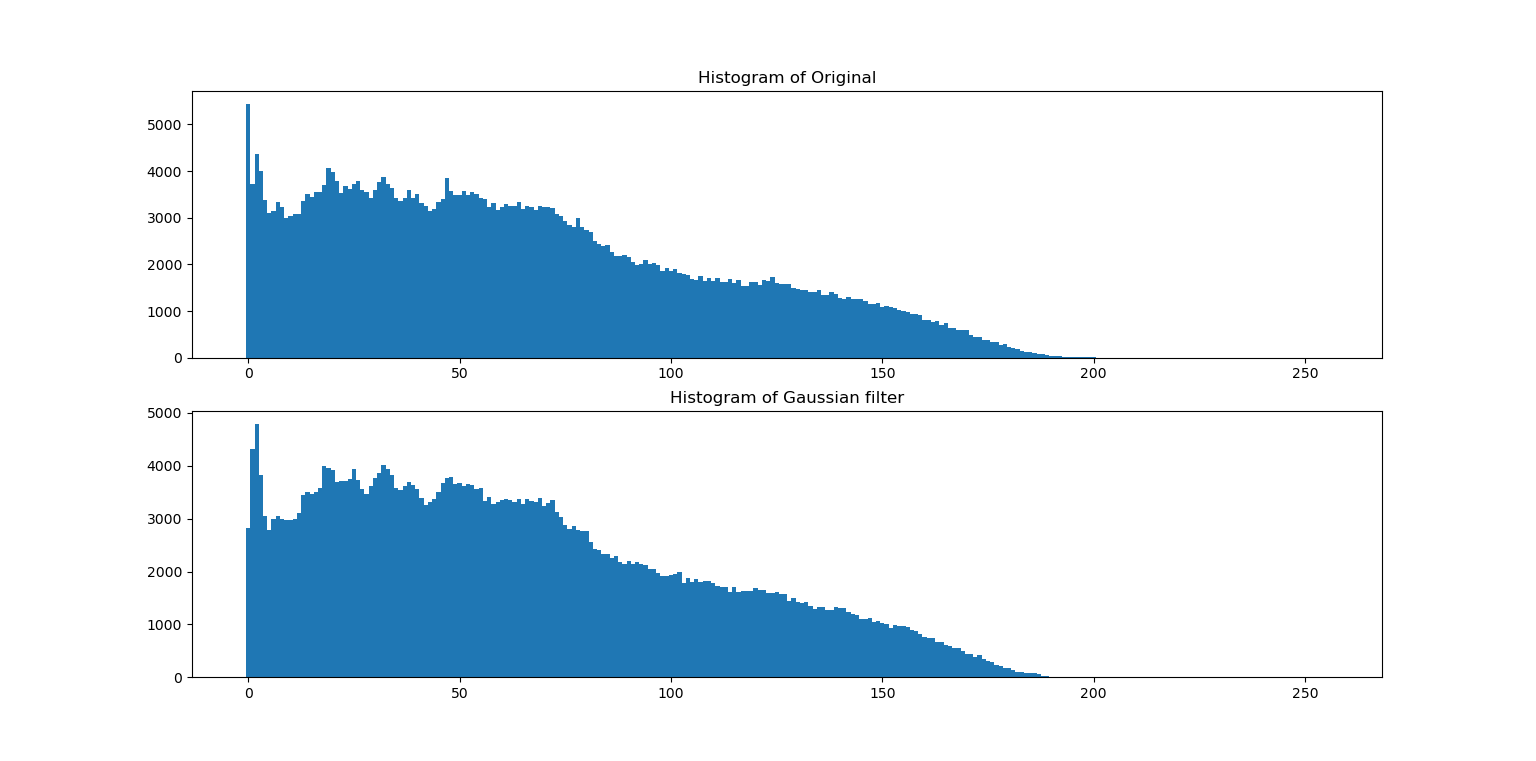
* **Gaussian**

**Fig.23** Original Image

**Fig. 24** Filter Image



**Fig. 25** Histogram of original image and filter image

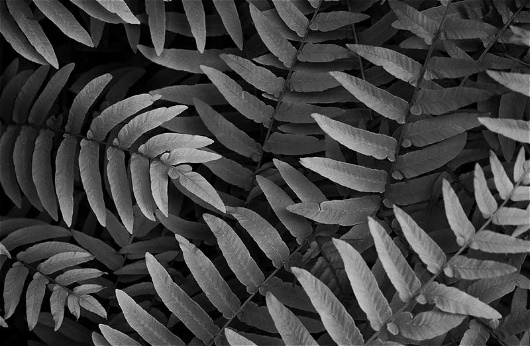
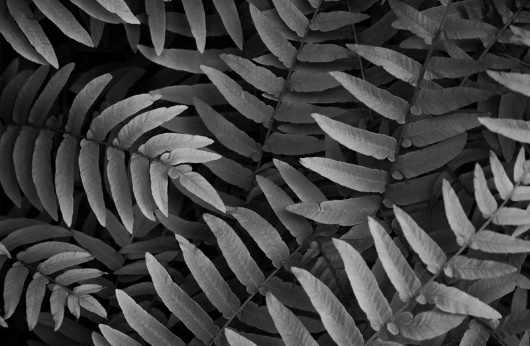


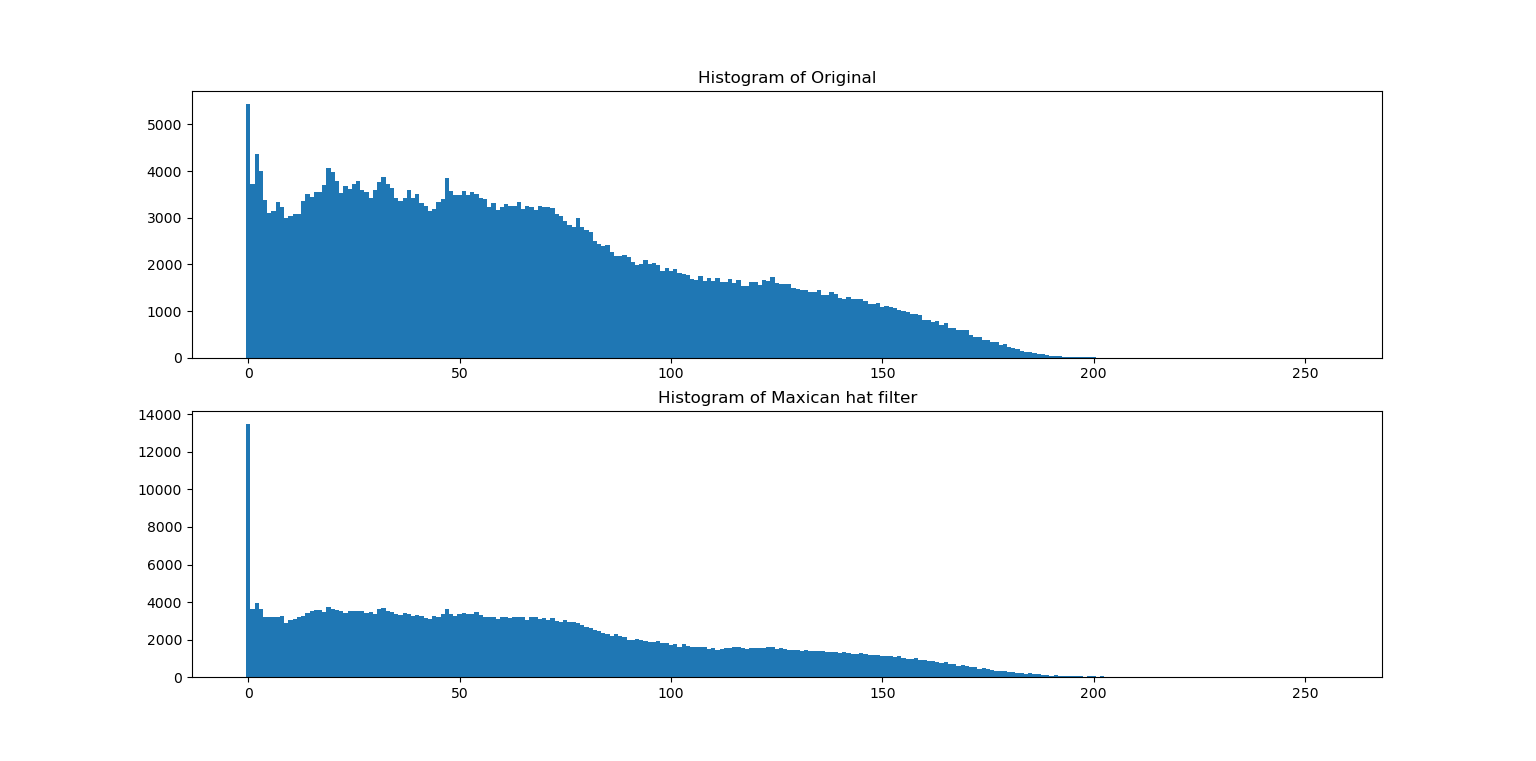
I chose Gaussian coefficient matrix =  From Fig. 24 shown that histogram of filter image is more blur than original image. Fig. 25 shown that the histogram of filter image is similar to original image

* **Maxican hat**

**Fig.26** Original Image

**Fig. 27** Filter Image





**Fig. 28** Histogram of original image and filter image

I chose Maxican hat coefficient matrix =  From Fig. 17 shown that histogram of filter image is more sharp than original image. Fig. 28 shown that the histogram of filter image has more zero intensity than original image