

DIP HW2課本習題

Problem 1

- 3.6** Explain why the discrete histogram equalization technique does not yield a flat histogram in general.

Problem 2

3.34 In the original image used to generate the three blurred images shown, the vertical bars are 5 pixels wide, 100 pixels high, and their separation is 20 pixels. The image was blurred using square box kernels of sizes 23, 25, and 45 elements on the side, respectively. The vertical bars on the left, lower part of (a) and (c) are blurred, but a clear separation exists between them.



(a)



(b)



(c)

However, the bars have merged in image (b), despite the fact that the kernel used to generate this image is much smaller than the kernel that produced image (c). Explain the reason for this.