## 1.PPT(43) PPT(120)

- 2.The shape of Gaussian function differs as we change parameters like Sigma,center of Gaussian function. Implement the corresponding results as Sigma increases. All results should be in a single .gif image.(Example at http://img.blog.csdn.net/20160928110256532). You can choose any programming language you are familiar with.
- 3.Implement the histogram equalization to the input images Q\_1\_1 and Q\_1\_2; submit your code and the output images.
- 4.Reduce the salt-and-pepper noise; submit your code and the output image. The input image is here Q\_2.
- 5. (1) Implement in Matlab to read an image, create a Gauss filter of size 4x4, and apply the filter to the image with convolution, padding.
- (2) Give one intensity transformation function for spreading the intensities of an image such that the lowest is  $I_{\min}$  and the highest is  $I_{\max}$ , (0 <  $I_{\min}$  <  $I_{\max}$  < 255). Denote by

 $f_{\max}$  and  $f_{\min}$  the maximum and minimum intensities values of the input image. Write a program to implement intensity function.