

Homework 3  
Deadline:  
1401/1/24  
23:59



signal and systems

1- let  $x[n] = [0, 1, 1, 2, 1, 2, 1, 0, 1, 2, 2, 1, 0, 1, 1, 0]$  be a digital signal  
compute the co-occurrence matrices,  $P_1$ ,  $P_2$ , and  $P_3$   
compute the energy of values on the main diagonal of  $P_1$ ,  $P_2$ , and  $P_3$

2- estimate a function for the following data using KDE.

note:

implement your code using python or matlab

$$[(X, Y)] = [(1, 1.02), (1.02, 2.009), (2, 3.001), (2, 3), (3, 3.01), (4.2, 4.5)]$$

3- find the histogram of your image. (an arbitrary image)

note:

implement your code using python or matlab