

Question 1- Histograms

Consider an N by N image I with intensity values

$$I[i, j] = |i - j| \quad i, j \in \{0, 1, \dots, N - 1\}, \quad I[i, j] \in \{0, 1, 2, \dots, N - 1\}.$$

Let $h[k]$ be the value of the histogram of I at intensity level k .

- a) What is $h[0]$?
- b) What is $h[i]$ for $0 < i < N$?
- c) Draw the histogram for $N = 8$.