

Exercise Sheet Image Processing 03

Submission: date hour

Exercise 1 Contrast Enhancement (10 Points)

- a) Given a low contrast image what are the characteristic of its brightness histogram and cumulative brightness frequency? How should these look like to have a high contrast image? (4 Points)

1	3	2	6	3	6
6	1	7	1	3	7
6	7	3	1	7	7
6	3	1	7	7	7
6	6	1	6	1	8
7	3	7	6	6	3

Table 1: Image

- b) Using the gray scale image above:
- (a) Create the brightness histogram of this image
 - (b) Plot the cumulative brightness frequency
 - (c) Perform an histogram equalization and plot the resulting equalized histogram
- (10 Points)
- c) What are the problematics of this kind of brightness equalization? Which image distortions could appear in the image after equalization? Why? (4 Points)