## **Image Preprocessing 1**

## Histogram

## Numerical exercise

 $r_6 = 6/7$  122

81

 $r_7 = 1$ 



0.03

0.02



The transformation function has the staircase form shown in the previous page. Since only eight equally spaced levels are allowed in this case, each of the transformed value must be assigned to its closest valid level.

Thus we have:

$$\begin{split} s_0 &\cong 1/7 \quad s_4 \cong 6/7 \\ s_1 &\cong 3/7 \quad s_5 &\cong 1 \\ s_2 &\cong 5/7 \quad s_6 &\cong 1 \\ s_3 &\cong 6/7 \quad s_7 &\cong 1 \end{split}$$