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**ENGR652**

**Homework 2**

3.1 Give a single intensity transformation function for spreading the intensities of an image so the lowest intensity is 0 and the highest is L-1.

Let denote:

* : the desired function
* : the original image

To normalize the intensities within the range [0, L-1]. First we need to derive a function in the range [0,1] by . Next, we multiply by L – 1, this yields

which the values in the range [0, L-1 ]

3.2