EE4902 Part 2 Assignment 1

Name: Lim Jia Song John

Matriculation No.: U1321554J

# Derive the **grayscale transformation** for contrast stretching.

The transformation function for linear contrast stretching is as follows:

Let ‘r’ be the pixel in the original image and ‘s’ is the pixel in the contrast stretched image. In a grayscale image, a pixel’s value ranges from 0 to 255.

Let the original image contain:

In low contrast images,

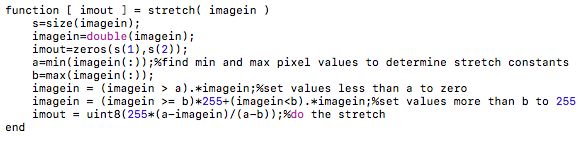
Let the enhanced image be having

To linearly map f to g:

Since , the enhanced pixel value is:

# Experiment contrast stretching for images using the web site below.

Code in Matlab was implemented to transform the image pixels. The code used is as follows:



The contrast stretched images were then compared with the original image and the results are presented as follows:

