ELEG-475/675 Homework Assignments #1
Due Date: March 3, 2005

Reading Assignments: related book chapters and all technical papers posted on WebCT

Book Problems: 3.25, 3.28

Implementations:

1. Implement a Matlab function that performs histogram equalization
   a. Perform histogram equalization on the image provided on WebCT
   b. Hand in a write up that includes, at a minimum, the original image, a plot of its histogram, a plot of the histogram-equalization transformation function, the enhanced image, and a plot of its histogram. Use this information to explain why the resulting image was enhanced as it was. Your hand in should also include the developed code.

2. Implement a Matlab function that performs unsharp masking.
   a. Perform unsharp masking on the image provided on WebCT
   b. Hand in a write up that includes, at minimum, the original and sharpened images for various values of $A$. An explanation should be given for the rationale used to decide the best value of $A$. Your hand in should include the developed code.