

Image Compression and Packet Video
November 16, 2009
Homework #6
Dr. Nicholas Beser
e-mail: Nicholas.Beser@jhuapl.edu

- 1. Reading assignment: Sec. 8.5-8.7, 8.3.2,8.3.3**
- 2. Written assignment (Due December 14, 2009)**

Prob. 8.16 and MATLAB Program:

Write a program to perform vector quantization on a gray scale image using 4x4 pixels as a vector. You should design your codebook using all the blocks in the image as training data, using the generalized Lloyd algorithm. Then quantize the image using your codebook. You can choose the codebook size, say, $L=128$ or 256 . If your program can work with any specified codebook size L , then you can observe the quality of quantized images with different L .