EN-74 ECE: Introduction to Image Processing
Tufts University
Fall 2007
Problem Set 6
Due October 18, 2007

READING: McAndrew Chapter 5

1. For the example 2D convolution on slides 3 and 4 of Lecture 6, compute *y[1,1], y[5,3]* and *y[3,5]* for the case where *a=1, b=-1, c=1, d=-1*, etc.
2. Explain the role of the parameters σ_1, σ_2, and ρ in the more general form of the Gaussian. Demonstrate what they "do" by plotting the filters and showing their effect on the image `blocks.tif` provided with this problem set.
3. McAndrew problems 5.6, 5.7, and 5.8.