

Image Processing and Computer Vision (MPHY39600/CS35600) (Kenji Suzuki)

Problem Set 7 (Due: the class after the next class)

Solutions should include relevant images and original code (written in your favorite computer language, e.g., C, C++, Matlab, IDL, etc.) of the algorithms developed, along with any discussion requested. All the images are on the Chalk website at <http://chalk.uchicago.edu> and in the uncompressed TIFF format.

- (1) The Fourier Snake as described in the lecture, Pattern and Shape Analysis 3, works when the underlying images are grayscale images, even though it assumes only a binary *a priori* model. How? Hint: What will the value of the cost function, H , be when a grayscale image is used for I ?