

## BPHS 4090 (Fall 2013) - Computer Exercise 4: Image Processing

**Due Date: Dec. 4, 2013 5:00 PM**

### Question

Find a greyscale picture of your choosing. Your task here is to convolve the image with a *kernel* that you create so to 'process' the image<sup>1</sup>. Make sure to clearly explain in your code any assumptions you made (e.g., how you handled the edges).

- a. Create a *sharpening* kernel and apply it to your image.
- b. Create a *blurring* kernel and apply it to your image.
- c. Are the results as you expected? Briefly explain why or why not?

Try using a relatively simple image to start off with (e.g., the images from HW2).

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<sup>1</sup>If you are using Matlab, the functions `imread`, `imagesc`, and `rgb2gray` are useful.