

Homework 1:

Due Monday, February 6 at the beginning of class.

*Use thresholding and morphology to “segment” the two neuron images uploaded to the Collab site, “axons.jpeg” and “controlneuron.jpeg”. Segmentation means to make a binary image, where 1’s represent the neurons, 0’s the background. By the way, the faint axons at the top of the “axons.jpeg” image should be included in the analysis.

*Come up with your best solution and, WITHOUT CHANGING PARAMETERS, show results on both images.

*Measure, in terms of a percentage, the amount of 1’s in each image (i.e., 5% neuron, 95% background, for example). Report these two numbers.

*Turn in: 2 printed binary images (the segmentation results), the m-file, a list of steps that you took and the percentage neuron for each image.