

Instructions for Running the GUI for GAIN

1. The GUI was developed using Matlab to serve as the user interface of the neuron image analyzer GAIN. To use the GUI, run the program in NeuronGUI.m.
2. The GUI is able to guide the user through the parameter selection process. To begin with, the user needs to open an image file (paired). Then, the GUI will allow the user to select the value for each parameter in a stepwise manner and display the image processing results until the optimal parameter values are determined. The user is able to save the current parameter values into a file or open an existing parameter file.
3. Once satisfied with the parameter values, the user is able to apply the parameters to image processing on multiple images. To switch to the batch processing mode, click on the “Exit to Batch Processing” button at the bottom of the control panel window. Before the processing starts, the GUI will ask the user to determine the output directory and the input. The input can be a single image file, multiple image files, or a directory. Only when both of the output and input are selected will the “Process” button be activated. Click the “Process” button to start batch processing. A wait bar will be created to indicate the current progress and provide a time estimate.