Checkpoint #1 Harkley

The main challenge I encountered was spending time trying to research the right FMRI dataset and how to input it into python. My plan changed because it was more interesting to try to model the data based on the known responses to PTSD using spiking neurons instead of just creating a DNN that diagnosed brain scans. To meet the deadline I made a spiking network that was overshooting on the “learned” values.

Moving forward, I want to do more research about how people’s responses to trauma vary based on number of events, how the learned synaptic connections affect other regions in the brain (sensory and perception), and how to retrain the synapses to return to “normal” responses after they have been trained overshoot or undershoot. Learning how to represent these responses accurately in Nengo could give us insight into PTSD patients’ most effective methods for recovery and returning to baseline.