All figures saved using 300DPI, vectorized

**Figure 1:** Is the computational model. Show the hand with the pads, show the transparent array. Show the neural population. Zoom in on collection of cells, zoom in to show the motif. ZOOM within a cell to show the different integration segments.

**Figure 2:** show that microstimulation and optogenetic manipulations are working as intended. i.e., The more current (ICMS) or light intensity (opto), the more neurons are activated. Using the center of the electrode as the stimulation point.

ICMS effects on each finger pad.





**Figure 3:** ICMS effects on axon direction (axons located towards the stimulation point enable faster activation of cells)



**Figure 4:** ICMS and opto effects on excitatory vs. inhibitory cells



**Figure 5:** ICMS effects motion vs. non-motion tuned



**Figure 6:** Optimization stuff

**Extra Figures:**

