

Computation in biological systems: biological and computational vision

You look at your best friend. He is pretty square (top figure). The reflectances of his mouth, nose, eyes and skin are 50%, 60%, 10% and 90%. One of your ganglion cells is OFF-center, and has gain -1.0 in the center pixel and +0.1 in the 8 surrounding pixels (middle figure). As you move your eye around, you place that ganglion cell in the three positions indicated here (bottom figure).



A) If you turn on a 100W light, what are the responses of the ganglion cell in those three positions?

B) And if you turn on 10 times more lights?

C) Why were you able to answer question 1?

