Subhasis Ray, Ph.D.

Visiting Research Fellow

Section on Sensory Coding and Neural Ensembles

NICHD, NIH, Bethesda, MD 20892

Subhasis studies neural circuits using *in vivo* experiments and computational models. He is interested in understanding how small networks of neurons can perform simple tasks like odor identification. For this, he conducts electrophysiological experiments on insects and obtains 3D structures of neurons in their brain using confocal microscopy. In parallel to this, he develops models of these neurons and neural circuits in order to understand the principles of information processing in the brain through computer simulations.

Subhasis has an undergraduate degree in Computer Science and Engineering and industrial experience in developing enterprise software for businesses. His Ph.D. research was focused on modeling and simulation of cortical networks. Subhasis also participated in developing neuronal simulation software, formats for computational models and simulation data, and data visualization tools for neuroscience.

Subhasis mostly uses Python for his current work. He has experience in C/C++, Java, R, Lisp and SQL.