Resource Summary Report

Generated by T1D on Aug 1, 2026

Neuron-C

RRID:SCR_014148
Type: Tool

Proper Citation

Neuron-C (RRID:SCR_014148)

Resource Information

URL: http://www.nitrc.org/projects/neuron-c/

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Description: A simulation language for modeling biophysically realistic neural circuits (1 to 10,000 neurons) and simulating physiology experiments on it. Programs for plotting and displaying data are included.

Synonyms: NeuronC Neural Simulation Language, Neuron C Neural Simulation Language, NeuronC

Resource Type: source code, software application, software resource, simulation software

Keywords: simulation, simulation language, source code, neural circuit

Availability: Available to the research community

Resource Name: Neuron-C

Resource ID: SCR_014148

Alternate URLs: http://retina.anatomy.upenn.edu/~rob/neuronc.html

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Record Creation Time: 20220129T080319+0000

Record Last Update: 20260801T042727+0000

Ratings and Alerts

No rating or validation information has been found for Neuron-C.

No alerts have been found for Neuron-C.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 7 mentions in open access literature.

Listed below are recent publications. The full list is available at T1D .

Wu J, et al. (2023) Two mechanisms for direction selectivity in a model of the primate starburst amacrine cell. Visual neuroscience, 40, E003.

Hellmer CB, et al. (2021) Cholinergic feedback to bipolar cells contributes to motion detection in the mouse retina. Cell reports, 37(11), 110106.

Chen Q, et al. (2020) Preserving inhibition with a disinhibitory microcircuit in the retina. eLife, 9.

Oesterle J, et al. (2020) Bayesian inference for biophysical neuron models enables stimulus optimization for retinal neuroprosthetics. eLife, 9.

Ding H, et al. (2016) Species-specific wiring for direction selectivity in the mammalian retina. Nature, 535(7610), 105.

Abbas SY, et al. (2013) Directional summation in non-direction selective retinal ganglion cells. PLoS computational biology, 9(3), e1002969.

Schachter MJ, et al. (2010) Dendritic spikes amplify the synaptic signal to enhance detection of motion in a simulation of the direction-selective ganglion cell. PLoS computational biology, 6(8).