Resource Summary Report

Generated by NIF on Apr 27, 2025

L-Neuron

RRID:SCR_014132
Type: Tool

Proper Citation

L-Neuron (RRID:SCR_014132)

Resource Information

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

Proper Citation: L-Neuron (RRID:SCR_014132)

Description: A program which creates anatomically realistic virtual neurons using the formalism of the Lyndenmayer systems to implement sets of neuroanatomical rules discovered by several research groups. The program algorithms read in experimental data - in the form of statistical distributions - to generate virtual structures. L-Neuron samples the values of the parameters within these statistical distributions in a stochastic (random) fashion during dendritic growth.

Synonyms: L Neuron

Resource Type: simulation software, software resource, software application

Keywords: simulation softare, virtual neuron, neuronal modeling

Funding:

Availability: Available to the research community

Resource Name: L-Neuron

Resource ID: SCR_014132

Alternate URLs: http://krasnow1.gmu.edu/cn3/L-Neuron/home.htm

License: Freeware

Record Creation Time: 20220129T080319+0000

Record Last Update: 20250426T060347+0000

Ratings and Alerts

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

No alerts have been found for L-Neuron.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 5 mentions in open access literature.

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

Bingham CS, et al. (2020) ROOTS: An Algorithm to Generate Biologically Realistic Cortical Axons and an Application to Electroceutical Modeling. Frontiers in computational neuroscience, 14, 13.

Chou ZZ, et al. (2020) Generation of Granule Cell Dendritic Morphologies by Estimating the Spatial Heterogeneity of Dendritic Branching. Frontiers in computational neuroscience, 14, 23.

Bingham CS, et al. (2018) Model-Based Analysis of Electrode Placement and Pulse Amplitude for Hippocampal Stimulation. IEEE transactions on bio-medical engineering, 65(10), 2278.

Hendrickson PJ, et al. (2015) Interactions between Inhibitory Interneurons and Excitatory Associational Circuitry in Determining Spatio-Temporal Dynamics of Hippocampal Dentate Granule Cells: A Large-Scale Computational Study. Frontiers in systems neuroscience, 9, 155.

Schneider CJ, et al. (2012) Toward a full-scale computational model of the rat dentate gyrus. Frontiers in neural circuits, 6, 83.