Vaa3D
RRID:SCR_002609
Type: Tool

Proper Citation

Vaa3D (RRID:SCR_002609)

Resource Information

URL: http://www.vaa3d.org

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Description: A handy, fast, and versatile 3D/4D/5D Image Visualization & Analysis System for Bioimages & Surface Objects. Vaa3D is a cross-platform (Mac, Linux, and Windows) tool for visualizing large-scale (gigabytes, and 64-bit data) 3D/4D/5D image stacks and various surface data. It is also a container of powerful modules for 3D image analysis (cell segmentation, neuron tracing, brain registration, annotation, quantitative measurement and statistics, etc) and data management. Vaa3D is very easy to be extended via a powerful plugin interface. For example, many ITK tools are being converted to Vaa3D Plugins. Vaa3D-Neuron is built upon Vaa3D to make 3D neuron reconstruction much easier. In a recent Nature Biotechnology paper (2010, 28(4), pp.348-353) about Vaa3D and Vaa3D-Neuron, an order of magnitude of performance improvement (both reconstruction accuracy and speed) was achieved compared to other tools.

Resource Type: Resource, image analysis software, data processing software, software application, data management software, data visualization software, software resource, software toolkit

References: PMID:20231818
Keywords: reusable library, atlas application, c, c++, cygwin, fiber tracking, gnome, image display, kde, linux, macos, microsoft, magnetic resonance, neuronal characterization, development environment, position, posix/unix-like, quantification, registration, rendering, resampling, segmentation, shape analysis, spatial transformation, surface analysis, tractography, visualization, volumetric analysis, warping, win32 (ms windows), windows, windows 95/98/2000, windows nt/2000, windows vista, windows xp, 3d neuron reconstruction, 3d, neuron, reconstruction, microscopy

Parent Organization: Janelia Research

Funding Agency: Howard Hughes Medical Institute

Related resources: Insight Segmentation and Registration Toolkit

Availability: v3D License 2010-April, Http://www.nitrc.org/include/glossary.php#581

Website Status: Last checked up

Abbreviations: Vaa3D, Vaa3D-Neuron

Resource Name: Vaa3D

Resource ID: SCR_002609

Alternate IDs: nlx_156012

Alternate URLs: http://www.nitrc.org/projects/v3d

Ratings and Alerts

- 5 / 5 (3 votes) Rated at NITRC http://www.nitrc.org/projects/v3d

No alerts have been found for Vaa3D.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 97 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.


