Resource Summary Report

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BrainVISA / Anatomist

RRID:SCR_007354 Type: Tool

Proper Citation

BrainVISA / Anatomist (RRID:SCR_007354)

Resource Information

URL: http://www.brainvisa.info/

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Description: BrainVISA is a modular an customizable software platform built to host heterogeneous tools dedicated to neuroimaging research. Many toolboxes have already been developed for BrainVISA (T1 MRI, sulcal identification and morphometry, cortical surface analysis, diffusion imaging and tractography, fMRI, nuclear imaging, EEG and MEG, TMS, histology and autoradiography, etc.). Anatomist is a software for interactive visualization of multimodal data and for manipulation of structured 3D objects. It allows to build scenes that merge or combine images, meshes, regions of interest, fibers, textures, color palettes, referential changes, etc. A user can interact in 3D and in real time with the objects of an Anatomist scene: change point of view, select objects, add/suppress objects, change colors, draw regions of interests, do manual registration, etc. BrainVISA main features are: * Harmonization of communications between different software. For instance, BrainVISA toolboxes are using home-made software but also third-party software such as FreeSurfer, FSL, SPM, nipy, R-project, Matlab, etc. * Ontology-based data organization allowing database sharing and automation of mass of data analysis. * Fusion and interactive visualization of multimodal data (using Anatomist software). * Automatic generation of graphical user interfaces. * Workflow monitoring and data quality checking. * Full customization possible. * Runs on Linux, Mac and Windows. * Programming Language: C++, Python * Supported Data Format: ANALYZE, DICOM, GIfTI, MINC, NIfTI-1, Other Format

Synonyms: BrainVISA/Anatomist, BrainVISA

Resource Type: image processing software, software application, image analysis software, data processing software, software development tool, software development environment, software resource

Keywords: neuroimaging, database, tensor metric, morphology, quantitative shape analysis, segmentation, spatial transformation, surface analysis, diffusion mr fiber tracking, visualization, platform environment, development environment, FASEB list

Funding: French Ministry of Higher Education and Research ; ACI telemedecine

Availability: CeCILL license v2

Resource Name: BrainVISA / Anatomist

Resource ID: SCR_007354

Alternate IDs: nif-0000-00264

Alternate URLs: http://www.nitrc.org/projects/brainvisa, http://anatomist.info

Record Creation Time: 20220129T080241+0000

Record Last Update: 20250509T055843+0000

Ratings and Alerts

No rating or validation information has been found for BrainVISA / Anatomist.

No alerts have been found for BrainVISA / Anatomist.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 228 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>dkNET</u>.

Touron E, et al. (2025) Depressive symptoms in older adults are associated with changes in stress-related markers, functional connectivity and brain volume. Alzheimer's research & therapy, 17(1), 9.

Snyder WE, et al. (2023) A bipolar taxonomy of adult human brain sulcal morphology related to timing of fetal sulcation and trans-sulcal gene expression gradients. bioRxiv : the preprint server for biology.

Bochicchio D, et al. (2023) Measurement of Protein Synthesis Rate in Rat by [11C]Leucine

PET Imaging: Application to the TgF344-AD Model of Alzheimer's Disease. Molecular imaging and biology, 25(3), 596.

Xicota L, et al. (2023) Modifications of the endosomal compartment in fibroblasts from sporadic Alzheimer's disease patients are associated with cognitive impairment. Translational psychiatry, 13(1), 54.

Hsiao FJ, et al. (2023) Characteristic oscillatory brain networks for predicting patients with chronic migraine. The journal of headache and pain, 24(1), 139.

Fraize J, et al. (2023) Mapping corpus callosum surface reduction in fetal alcohol spectrum disorders with sulci and connectivity-based parcellation. Frontiers in neuroscience, 17, 1188367.

Graff-Radford J, et al. (2022) Cerebrospinal fluid dynamics and discordant amyloid biomarkers. Neurobiology of aging, 110, 27.

Hsiao FJ, et al. (2022) Resting-state magnetoencephalographic oscillatory connectivity to identify patients with chronic migraine using machine learning. The journal of headache and pain, 23(1), 130.

Mortamais M, et al. (2022) Sulcal morphology as cognitive decline predictor in older adults with memory complaints. Neurobiology of aging, 113, 84.

Wang Y, et al. (2022) Morphological and hemispheric and sex differences of the anterior ascending ramus and the horizontal ascending ramus of the lateral sulcus. Brain structure & function, 227(6), 1949.

Bertacchini F, et al. (2022) Modelling brain dynamics by Boolean networks. Scientific reports, 12(1), 16543.

Fehlbaum LV, et al. (2022) Mother-child similarity in brain morphology: A comparison of structural characteristics of the brain's reading network. Developmental cognitive neuroscience, 53, 101058.

Bodin C, et al. (2021) Plis de passage in the superior temporal sulcus: Morphology and local connectivity. NeuroImage, 225, 117513.

Perani D, et al. (2021) White matter deficits correlate with visual motion perception impairments in dyslexic carriers of the DCDC2 genetic risk variant. Experimental brain research, 239(9), 2725.

Li X, et al. (2021) Atypical sulcal pattern in boys with attention-deficit/hyperactivity disorder. Human brain mapping, 42(13), 4362.

Filippi I, et al. (2021) Neuroimaging evidence for structural correlates in adolescents resilient to polysubstance use: A five-year follow-up study. European neuropsychopharmacology : the journal of the European College of Neuropsychopharmacology, 49, 11.

Lagarde J, et al. (2021) Distinct amyloid and tau PET signatures are associated with diverging clinical and imaging trajectories in patients with amnestic syndrome of the hippocampal type. Translational psychiatry, 11(1), 498.

Burman DD, et al. (2021) Topography of hippocampal connectivity with sensorimotor cortex revealed by optimizing smoothing kernel and voxel size. PloS one, 16(12), e0260245.

Dautricourt S, et al. (2021) Longitudinal Changes in Hippocampal Network Connectivity in Alzheimer's Disease. Annals of neurology, 90(3), 391.

Li TR, et al. (2021) Recognition of seizure semiology and semiquantitative FDG-PET analysis of anti-LGI1 encephalitis. CNS neuroscience & therapeutics, 27(10), 1173.