

Resource Summary Report

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JIST: Java Image Science Toolkit

RRID:SCR_008887

Type: Tool

Proper Citation

JIST: Java Image Science Toolkit (RRID:SCR_008887)

Resource Information

URL: <http://www.nitrc.org/projects/jist/>

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Description: A native Java-based imaging processing environment similar to the ITK/VTK paradigm. Initially developed as an extension to MIPAV (CIT, NIH, Bethesda, MD), the JIST processing infrastructure provides automated GUI generation for application plug-ins, graphical layout tools, and command line interfaces. This repository maintains the current multi-institutional JIST development tree and is recommended for public use and extension. JIST was originally developed at IACL and MedIC (Johns Hopkins University) and is now also supported by MASI (Vanderbilt University).

Abbreviations: JIST

Synonyms: Java Image Science Toolkit

Resource Type: software resource, software application, data processing software

Defining Citation: [PMID:20077162](#)

Keywords: experimental control, modeling, quantification, segmentation, shape analysis, spatial transformation, workflow, macos, windows, os independent, bsd, linux, sunos/solaris, java, afni brik, analyze, cor, dicom, gifti, mgh/mgz, minc, minc2, nifti-1, nrrd, philips par/rec, magnetic resonance

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NIA N01-AG-4-0012

Availability: GNU Lesser General Public License

Resource Name: JIST: Java Image Science Toolkit

Resource ID: SCR_008887

Alternate IDs: nlx_151344

Alternate URLs: <https://sources.debian.org/src/jist/>

Record Creation Time: 20220129T080249+0000

Record Last Update: 20260731T042802+0000

Ratings and Alerts

No rating or validation information has been found for JIST: Java Image Science Toolkit.

No alerts have been found for JIST: Java Image Science Toolkit.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 20 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Gau R, et al. (2020) Resolving multisensory and attentional influences across cortical depth in sensory cortices. eLife, 9.

Rowley CD, et al. (2018) Altered Intracortical T1-Weighted/T2-Weighted Ratio Signal in Huntington's Disease. Frontiers in neuroscience, 12, 805.

Campion T, et al. (2017) FLAIR* to visualize veins in white matter lesions: A new tool for the diagnosis of multiple sclerosis? European radiology, 27(10), 4257.

Rowley CD, et al. (2017) Age-related mapping of intracortical myelin from late adolescence to middle adulthood using T1 -weighted MRI. Human brain mapping, 38(7), 3691.

Huo Y, et al. (2017) Simultaneous total intracranial volume and posterior fossa volume estimation using multi-atlas label fusion. Human brain mapping, 38(2), 599.

Ye C, et al. (2017) A Metabolic Function for Phospholipid and Histone Methylation. Molecular cell, 66(2), 180.

Bohlken MM, et al. (2016) Topology of genetic associations between regional gray matter volume and intellectual ability: Evidence for a high capacity network. Neurolmage, 124(Pt A), 1044.

Huo Y, et al. (2016) Consistent cortical reconstruction and multi-atlas brain segmentation. Neurolmage, 138, 197.

Sweeney EM, et al. (2016) Relating multi-sequence longitudinal intensity profiles and clinical covariates in incident multiple sclerosis lesions. *NeuroImage. Clinical*, 10, 1.

Dworkin JD, et al. (2016) PREVAIL: Predicting Recovery through Estimation and Visualization of Active and Incident Lesions. *NeuroImage. Clinical*, 12, 293.

Ye C, et al. (2015) Segmentation of the Cerebellar Peduncles Using a Random Forest Classifier and a Multi-object Geometric Deformable Model: Application to Spinocerebellar Ataxia Type 6. *Neuroinformatics*, 13(3), 367.

Hashim E, et al. (2015) Patterns of myeloarchitecture in lower limb amputees: an MRI study. *Frontiers in neuroscience*, 9, 15.

Rowley CD, et al. (2015) Assessing intracortical myelin in the living human brain using myelinated cortical thickness. *Frontiers in neuroscience*, 9, 396.

Banalagay R, et al. (2014) Resource estimation in high performance medical image computing. *Neuroinformatics*, 12(4), 563.

Chen M, et al. (2013) Automatic magnetic resonance spinal cord segmentation with topology constraints for variable fields of view. *NeuroImage*, 83, 1051.

Soares JM, et al. (2013) A hitchhiker's guide to diffusion tensor imaging. *Frontiers in neuroscience*, 7, 31.

Kim DN, et al. (2012) Quantitative prediction of 3D solution shape and flexibility of nucleic acid nanostructures. *Nucleic acids research*, 40(7), 2862.

Landman BA, et al. (2012) Resolution of crossing fibers with constrained compressed sensing using diffusion tensor MRI. *NeuroImage*, 59(3), 2175.

Landman BA, et al. (2011) Multi-parametric neuroimaging reproducibility: a 3-T resource study. *NeuroImage*, 54(4), 2854.

Shinohara RT, et al. (2011) Population-wide principal component-based quantification of blood-brain-barrier dynamics in multiple sclerosis. *NeuroImage*, 57(4), 1430.