Resource Summary Report

Generated by NIF on May 17, 2025

MITK Diffusion

RRID:SCR_006846
Type: Tool

Proper Citation

MITK Diffusion (RRID:SCR_006846)

Resource Information

URL: http://www.mitk.org/DiffusionImaging

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Description: A selection of image analysis algorithms for the processing of diffusion-weighted MR images. Features & Highlights * Tensor and q-ball reconstruction * Glyph visualization * Quantification and partial volume clustering of tensor and q-ball images * Global fiber tractography, visualization, and tract post-processing * Brain network statistics and visualization (connectomics) * Interactive exploration of Tract-based spatial statistics (TBSS) results * Intra-voxel incoherent motion (IVIM) estimation * Synthetic data generation Additional system specific requirements: * Windows: If you have problems running the Windows application, please install the Microsoft Redistributable Packages for VS 2008: 32 bit or 64 bit * Linux: the Qt framework, version 4.6.2 or later Tested systems: Windows 7, Windows Vista; Ubuntu 12.04 and newer; OS X 10.6 (Snow Leopard), OS X 10.8 (Mountain Lion) The OS X 10.6 installer is compatible with OS X 10.7 (Lion) so there is no dedicated disk image build under 10.7. The MITK Diffusion application is based on the MITK research platform and the most of it is open-source. The available code is embedded into the source code of MITK as a module and can be accessed through the public git repository.

Abbreviations: MITK-DI

Synonyms: MITK Diffusion Imaging

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

Defining Citation: PMID:23038239

Keywords: tractography, diffusion tensor imaging, q-ball imaging, diffusion mri, data processing, analysis, visualization, connectomics, fiber tractography, tract post processing, glyph visualization, tensor reconstruction, q-ball reconstruction, scalar index, connectivity analysis, image reconstruction, modeling, quantification, segmentation, fiber tracking, macos, windows, os independent, linux, c++, dicom, nifti-1, nrrd, other format

Funding:

Availability: Most of it, Simplified BSD License

Resource Name: MITK Diffusion

Resource ID: SCR_006846

Alternate IDs: nlx_153917

Alternate URLs: http://www.nitrc.org/projects/mitk-diffusion

Record Creation Time: 20220129T080238+0000

Record Last Update: 20250517T055758+0000

Ratings and Alerts

No rating or validation information has been found for MITK Diffusion.

No alerts have been found for MITK Diffusion.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3 mentions in open access literature.

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

Loh M, et al. (2024) Effect of simultaneous multislice imaging, slice properties, and repetition time on the measured magnetic resonance biexponential intravoxel incoherent motion in the liver. PloS one, 19(8), e0306996.

Mayer P, et al. (2018) Changes in the microarchitecture of the pancreatic cancer stroma are linked to neutrophil-dependent reprogramming of stellate cells and reflected by diffusion-weighted magnetic resonance imaging. Theranostics, 8(1), 13.

Horn A, et al. (2016) Toward a standardized structural-functional group connectome in MNI

space. NeuroImage, 124(Pt A), 310.