

Resource Summary Report

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TrackVis

RRID:SCR_004817

Type: Tool

Proper Citation

TrackVis (RRID:SCR_004817)

Resource Information

URL: <http://trackvis.org/>

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Description: TrackVis is software tool that can visualize and analyze fiber track data from diffusion MR imaging (DTI/DSI/HARDI/Q-Ball) tractography. It does NOT perform actual fiber tracking. Diffusion Toolkit is a set of tools that reconstruct diffusion imaging data and generate fiber track data for TrackVis to visualize. Because these two sets of tools were developed and maintained separately and each has distinguished functionalities, they decided to distribute them as two separate programs for the ease of maintenance and upgrade. You do need both of them to perform complete diffusion data processing and analysis. Features of TrackVis include: * Cross-platform. Works on Windows, Mac OS X and Linux with native look and feel. * A variety of track filters (track selecting methods) allowing users to explore and locate specific bundles with ease. * Multiple rendering modes with customizable scalar-driven color codes. * Real-time parameter adjustment and 3D render. * Open format of the track data file allowing users to integrate customized scalar data into the track file and visualize and analyze it. Save and restore scenes in XML style scene file. * Statistical scalar analysis of tracks and ROIs. * Synchronized real-time multiple dataset analysis and display allowing time-point and/or subject comparison. Synchronized analysis and display on same dataset can also be performed in real-time remotely over the network. * Upfront in-line parameter adjustment in real-time. No tedious pop-up dialogs. TrackVis works with Track File created by Diffusion Toolkit. Diffusion Toolkit processes raw DICOM, Nifti format and ANALYZE images. TrackVis and Diffusion Toolkit are cross-platform software. They can run on Windows XP, Mac OS X as well as Linux.

Abbreviations: TrackVis

Synonyms: TrackVis and Diffusion Toolkit

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

Keywords: mri, dti, diffusion spectrum image, diffusion imaging, image reconstruction, diffusion mr fiber tracking, visualization, analyze, c++, console (text based), dicom, fiber tracking, image reconstruction, linux, macos, microsoft, magnetic resonance, nifti, posix/unix-like, tractography, visualization, win32 (ms windows), windows

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NIMH 5R01MH064044

Availability: Free for academic and non-profit research use, Non-commercial, For other purposes, Please contact them

Resource Name: TrackVis

Resource ID: SCR_004817

Alternate IDs: nlx_143916

Record Creation Time: 20220129T080226+0000

Record Last Update: 20250424T064732+0000

Ratings and Alerts

No rating or validation information has been found for TrackVis.

No alerts have been found for TrackVis.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 471 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Luo KL, et al. (2025) Generalizing Diffusion Tensor Imaging of the Physis and Metaphysis. Journal of magnetic resonance imaging : JMRI, 61(2), 798.

Kauv P, et al. (2025) The corticospinal tract in multiple sclerosis: correlation between cortical excitability and magnetic resonance imaging measures. Journal of neural transmission

(Vienna, Austria : 1996), 132(2), 265.

Seidel Malkinson T, et al. (2024) Intracortical recordings reveal vision-to-action cortical gradients driving human exogenous attention. *Nature communications*, 15(1), 2586.

Lankinen K, et al. (2024) Individualized white matter connectivity of the articulatory pathway: An ultra-high field study. *Brain and language*, 250, 105391.

Chilvers M, et al. (2024) White matter disconnection impacts proprioception post-stroke. *PloS one*, 19(9), e0310312.

Martin RC, et al. (2024) Recovery of Verbal Working Memory Depends on Left Hemisphere White Matter Tracts. *bioRxiv : the preprint server for biology*.

Ganesan K, et al. (2024) Cognitive control training with domain-general response inhibition does not change children's brains or behavior. *Nature neuroscience*, 27(7), 1364.

Thao PN, et al. (2024) Impacts of dioxin exposure on brain connectivity estimated by DTI analysis of MRI images in men residing in contaminated areas of Vietnam. *Frontiers in neuroscience*, 18, 1344653.

Cottam NC, et al. (2024) From circuits to lifespan: translating mouse and human timelines with neuroimaging based tractography. *bioRxiv : the preprint server for biology*.

Jensen VN, et al. (2024) V2a neurons restore diaphragm function in mice following spinal cord injury. *Proceedings of the National Academy of Sciences of the United States of America*, 121(11), e2313594121.

Pardina-Torner H, et al. (2024) Disentangling the neurobiological bases of temporal impulsivity in Huntington's disease. *Brain and behavior*, 14(3), e3335.

Suzuki Y, et al. (2024) High-angular resolution diffusion imaging generation using 3d u-net. *Neuroradiology*, 66(3), 371.

Barbeau EB, et al. (2024) Dissection of the Temporofrontal Extreme Capsule Fasciculus Using Diffusion MRI Tractography and Association with Lexical Retrieval. *eNeuro*, 11(1).

Ghielmetti F, et al. (2024) Quantitative Tractography-Based Evaluations in Essential Tremor Patients after MRgFUS Thalamotomy. *Movement disorders clinical practice*, 11(12), 1516.

Elias GJB, et al. (2024) A large normative connectome for exploring the tractographic correlates of focal brain interventions. *Scientific data*, 11(1), 353.

Villar-Rodríguez E, et al. (2024) Neuroanatomical correlates of musicianship in left-handers. *Behavioral and brain functions : BBF*, 20(1), 17.

Sarubbo S, et al. (2024) Changing the Paradigm for Tractography Segmentation in Neurosurgery: Validation of a Streamline-Based Approach. *Brain sciences*, 14(12).

González Rodríguez LL, et al. (2024) Phybers: a package for brain tractography analysis. *Frontiers in neuroscience*, 18, 1333243.

Ogawa M, et al. (2024) Characteristics of T2* and anisotropy parameters in inguinal and epididymal adipose tissues after cold exposure in mice. *Scientific reports*, 14(1), 29491.

Liu CJ, et al. (2024) Three-dimensional fiber orientation mapping of the human brain at micrometer resolution. *Research square*.