**MRtrix**

RRID:SCR_006971  
Type: Tool

**Proper Citation**

MRtrix (RRID:SCR_006971)

**Resource Information**


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**Description:** A set of tools to perform diffusion-weighted MRI white matter tractography in the presence of crossing fibres, using Constrained Spherical Deconvolution (Tournier et al., 2004; Tournier et al. 2007), and a probabilistic streamlines algorithm (e.g. Behrens et al., 2003; Parker et al., 2003). These applications have been written from scratch in C++, using the functionality provided by the GNU Scientific Library, and gtkmm. The software is currently capable of handling DICOM, NIfTI and AnalyseAVW image formats, amongst others.

**Installation**  
* Unix/Linux  
* Microsoft Windows  
* Mac Os X

**Resource Type:** Resource, software resource, software toolkit, source code, data processing software, software application

**Keywords:** white matter tractography, diffusion mri, tractography, fiber tracking, crossing fiber, constrained spherical deconvolution, diffusion mr fiber tracking, image display, dti, linux, c++, analyze, bshort, bfloat, dicom, nifti-1, magnetic resonance

**Parent Organization:** Florey Institute of Neuroscience and Mental Health; Victoria; Australia

**Related resources:** Diffusion MRI of Traumatic Brain Injury, neurodebian

**Availability:** GNU General Public License, Acknowledgement requested

**Website Status:** Last checked up

**Abbreviations:** MRtrix
Resource Name: MRtrix
Resource ID: SCR_006971
Alternate IDs: nlx_153918
Alternate URLs: http://www.nitrc.org/projects/mrtrix/

Ratings and Alerts

- 4.5 / 5 (10 votes) Rated at NITRC http://www.nitrc.org/projects/mrtrix/

No alerts have been found for MRtrix.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 87 mentions in open access literature.

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


Ashmore J, et al. (2020) Implementation of clinical tractography for pre-surgical planning of space occupying lesions: An investigation of common acquisition and post-processing
methods compared to dissection studies. PloS one, 15(4), e0231440.


Jitsuishi T, et al. (2020) Identification of a distinct association fiber tract "IPS-FG" to connect the intraparietal sulcus areas and fusiform gyrus by white matter dissection and tractography. Scientific reports, 10(1), 15475.


