

Resource Summary Report

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Automated Fiber Quantification in Python

RRID:SCR_023366

Type: Tool

Proper Citation

Automated Fiber Quantification in Python (RRID:SCR_023366)

Resource Information

URL: <https://yeatmanlab.github.io/pyAFQ/>

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Description: Software package focused on automated delineation of major fiber tracts in individual human brains, and quantification of tissue properties within the tracts. Software for automated processing and analysis of diffusion MRI data. Automates tractometry.

Abbreviations: pyAFQ

Resource Type: software resource, software toolkit

Defining Citation: [PMID:35079748](#)

Keywords: Automates tractometry, automated delineation of major fiber tracts, individual human brains, quantification of tissue properties, tissue properties within fiber tracts, diffusion MRI data,

Funding: NIMH 1RF1MH121868;
The BRAIN Initiative ;
Gordon and Betty Moore Foundation ;
Alfred P. Sloan Foundation ;
NIBIB R01EB027585;
NSF 1551330

Availability: Free, Available for download, Freely available

Resource Name: Automated Fiber Quantification in Python

Resource ID: SCR_023366

Record Creation Time: 20230321T180026+0000

Record Last Update: 20260801T042909+0000

Ratings and Alerts

No rating or validation information has been found for Automated Fiber Quantification in Python.

No alerts have been found for Automated Fiber Quantification in Python.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 12 mentions in open access literature.

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

Laamoumi M, et al. (2025) A taxonomic guide to diffusion MRI tractography visualization tools. NMR in biomedicine, 38(1), e5267.

Caffarra S, et al. (2025) Assessing white matter plasticity in a randomized controlled trial of early literacy training in preschoolers. PloS one, 20(3), e0309574.

Wang Z, et al. (2025) Along-Tract Diffusion Alterations in the Dentato-Rubro-Thalamic Tract Correlate With Motor and Cognitive Decline in Huntington's Disease. Human brain mapping, 46(11), e70305.

Zika S, et al. (2025) Cortical and white matter T1w/T2w development proceed in concert during early infancy. bioRxiv : the preprint server for biology.

Zhou DJ, et al. (2025) Free water elimination tractometry reveals local and remote white matter alterations in diffuse gliomas. Journal of neuro-oncology, 176(1), 115.

Kamagata K, et al. (2024) Advancements in Diffusion MRI Tractography for Neurosurgery. Investigative radiology, 59(1), 13.

Roy E, et al. (2024) Differences in educational opportunity predict white matter development. Developmental cognitive neuroscience, 67, 101386.

Kruper J, et al. (2024) Tractometry of the Human Connectome Project: resources and insights. Frontiers in neuroscience, 18, 1389680.

Kruper J, et al. (2024) Convolutional neural network-based classification of glaucoma using optic radiation tissue properties. Communications medicine, 4(1), 72.

Uy JP, et al. (2023) Early life stress, sleep disturbances, and depressive symptoms during adolescence: The role of the cingulum bundle. Developmental cognitive neuroscience, 63, 101303.

Kruper J, et al. (2023) Optic radiations representing different eccentricities age differently. Human brain mapping, 44(8), 3123.

Grotheer M, et al. (2023) Human white matter myelinates faster in utero than ex utero. Proceedings of the National Academy of Sciences of the United States of America, 120(33), e2303491120.