Resource Summary Report

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ANTsR

RRID:SCR_008891
Type: Tool

Proper Citation

ANTsR (RRID:SCR_008891)

Resource Information

URL: http://www.nitrc.org/projects/antsr

Proper Citation: ANTsR (RRID:SCR_008891)

Description: An R extension to ANTs that performs multivariate statistical parametric mapping of DTI, T1 and other datatypes for the purpose of both performing clinical studies and for tracking the performance of ANTs (and other) image processing methodologies. ANTsR depends upon the R statistical language, bash scripts and the ANTs toolkit. Some branches of ANTsR will also depend upon pipedream and specific datasets. Some of these datasets will be open access and, in that case, ANTsR will provide a 100% reproducible neuroimaging study on that data.

Abbreviations: ANTsR

Resource Type: software resource

Keywords: neuroimaging, multivariate statistical parametric mapping, dti, t1, image processing, magnetic resonance

Availability: BSD License

Resource Name: ANTsR

Resource ID: SCR_008891

Alternate IDs: nlx_151365

Record Creation Time: 20220129T080249+0000

Record Last Update: 20260725T190656+0000

Ratings and Alerts

No rating or validation information has been found for ANTsR.

No alerts have been found for ANTsR.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 47 mentions in open access literature.

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

Tustison NJ, et al. (2025) The ANTsX ecosystem for mapping the mouse brain. Nature communications, 16(1), 11548.

Roston RA, et al. (2025) Anatomy-aware, label-informed approach improves image registration for challenging datasets. bioRxiv : the preprint server for biology.

Tustison NJ, et al. (2025) Modular strategies for spatial mapping of diverse cell type data of the mouse brain. Research square.

Foltyn-Dumitru M, et al. (2025) The potential of GPT-4 advanced data analysis for radiomics-based machine learning models. Neuro-oncology advances, 7(1), vdae230.

Rauch P, et al. (2025) Low-grade gliomas do not grow along white matter tracts: evidence from quantitative imaging. Brain communications, 7(3), fcaf157.

Van Riper SM, et al. (2025) 16 weeks of moderate intensity resistance exercise improves strength but is insufficient to alter brain structure in Gulf War Veterans with chronic musculoskeletal pain: a randomized controlled trial. Frontiers in neuroscience, 19, 1488397.

Shainer I, et al. (2025) Transcriptomic neuron types vary topographically in function and morphology. Nature, 638(8052), 1023.

Bomyea J, et al. (2024) Change in Resting-State Functional Connectivity Following Working Memory Training in Individuals With Repetitive Negative Thinking. Biological psychiatry. Cognitive neuroscience and neuroimaging, 9(12), 1262.

Gennatas ED, et al. (2024) Gray matter correlates of attention-deficit hyperactivity disorder in boys versus girls with sensory processing dysfunction. Imaging neuroscience (Cambridge, Mass.), 2.

Foltyn-Dumitru M, et al. (2024) Advancing noninvasive glioma classification with diffusion radiomics: Exploring the impact of signal intensity normalization. Neuro-oncology advances, 6(1), vdae043.

Pan Q, et al. (2024) LncRNA gene ANTSR coordinates complementary sex determination in the Argentine ant. Science advances, 10(22), eadp1532.

Parmar V, et al. (2024) Fully automated MR-based virtual biopsy of primary CNS lymphomas. Neuro-oncology advances, 6(1), vdae022.

Foltyn-Dumitru M, et al. (2024) Impact of signal intensity normalization of MRI on the generalizability of radiomic-based prediction of molecular glioma subtypes. European radiology, 34(4), 2782.

Rolfe SM, et al. (2023) Deep learning enabled multi-organ segmentation of mouse embryos. Biology open, 12(2).

Caudle MM, et al. (2023) Neural activity and network analysis for understanding reasoning using the matrix reasoning task. Cognitive processing, 24(4), 585.

Chen X, et al. (2023) Genetic background of idiopathic neurodevelopmental delay patients with significant brain deviation volume. Chinese medical journal, 136(7), 807.

Magnotti JF, et al. (2023) Using predictive validity to compare associations between brain damage and behavior. Human brain mapping, 44(13), 4738.

Savriama Y, et al. (2022) Testing the accuracy of 3D automatic landmarking via genome-wide association studies. G3 (Bethesda, Md.), 12(2).

Diamond KM, et al. (2022) Computational anatomy and geometric shape analysis enables analysis of complex craniofacial phenotypes in zebrafish. Biology open, 11(2).

Mock N, et al. (2022) Lesion-symptom mapping corroborates lateralization of verbal and nonverbal memory processes and identifies distributed brain networks responsible for memory dysfunction. Cortex; a journal devoted to the study of the nervous system and behavior, 153, 178.