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

Funding:

Availability: BSD License

Resource Name: ANTsR

Resource ID: SCR_008891

Alternate IDs: nlx_151365

Record Creation Time: 20220129T080249+0000

Record Last Update: 20250214T183131+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 39 mentions in open access literature.

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

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.

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

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.

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.

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

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.

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

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

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

Kim M, et al. (2022) Development and Validation of a Model Using Radiomics Features from an Apparent Diffusion Coefficient Map to Diagnose Local Tumor Recurrence in Patients Treated for Head and Neck Squamous Cell Carcinoma. Korean journal of radiology, 23(11), 1078.

Avants BB, et al. (2021) Similarity-driven multi-view embeddings from high-dimensional biomedical data. Nature computational science, 1(2), 143.

Loução R, et al. (2021) A Fast Protocol for Multiparametric Characterisation of Diffusion in the Brain and Brain Tumours. Frontiers in oncology, 11, 554205.

Zhang L, et al. (2021) An Integrated Radiomics Model Incorporating Diffusion-Weighted Imaging and 18F-FDG PET Imaging Improves the Performance of Differentiating Glioblastoma From Solitary Brain Metastases. Frontiers in oncology, 11, 732704.

Tustison NJ, et al. (2021) The ANTsX ecosystem for quantitative biological and medical imaging. Scientific reports, 11(1), 9068.

Rijmenams I, et al. (2021) Age- and Intravenous Methotrexate-Associated Leukoencephalopathy and Its Neurological Impact in Pediatric Patients with Lymphoblastic Leukemia. Cancers, 13(8).

Pagani M, et al. (2021) mTOR-related synaptic pathology causes autism spectrum disorder-associated functional hyperconnectivity. Nature communications, 12(1), 6084.

Cheong EN, et al. (2021) Extrahippocampal Radiomics Analysis Can Potentially Identify Laterality in Patients With MRI-Negative Temporal Lobe Epilepsy. Frontiers in neurology, 12, 706576.