

Resource Summary Report

Generated by [NIF](#) on May 4, 2025

[elastix](#)

RRID:SCR_009619

Type: Tool

Proper Citation

elastix (RRID:SCR_009619)

Resource Information

URL: <http://elastix.isi.uu.nl/>

Proper Citation: elastix (RRID:SCR_009619)

Description: THIS RESOURCE IS NO LONGER IN SERVICE. Documented on February 23, 2023. Software toolbox for rigid and nonrigid registration of images. elastix is open source software, based on the well-known Insight Segmentation and Registration Toolkit (ITK). The software consists of a collection of algorithms that are commonly used to solve (medical) image registration problems. The modular design of elastix allows the user to quickly configure, test, and compare different registration methods for a specific application. A command-line interface enables automated processing of large numbers of data sets, by means of scripting. A paper describing elastix contains more details: S. Klein, M. Staring, K. Murphy, M.A. Viergever, J.P.W. Pluim, elastix: a toolbox for intensity based medical image registration,; IEEE Transactions on Medical Imaging, vol. 29, no. 1, pp. 196 - 205, January 2010.

Abbreviations: elastix

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

Defining Citation: [PMID:19923044](#)

Keywords: reusable library, analyze, c++, console (text based), domain independent, nifti, nrrd, os independent, philips par/rec, registration, resampling, spatial transformation, bio.tools

Funding:

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: elastix

Resource ID: SCR_009619

Alternate IDs: nlx_155845, biotools:elastix

Alternate URLs: <http://www.nitrc.org/projects/elastix>, <https://bio.tools/elastix>,
<https://sources.debian.org/src/elastix/>

Record Creation Time: 20220129T080254+0000

Record Last Update: 20250503T060130+0000

Ratings and Alerts

No rating or validation information has been found for elastix.

No alerts have been found for elastix.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 162 mentions in open access literature.

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

Ristic M, et al. (2025) First in-vivo magic angle directional imaging using dedicated low-field MRI. Magnetic resonance in medicine, 93(3), 1077.

Pruis IJ, et al. (2024) Potential of PSMA-targeting radioligand therapy for malignant primary and secondary brain tumours using super-selective intra-arterial administration: a single centre, open label, non-randomised prospective imaging study. EBioMedicine, 102, 105068.

Zimmerman CA, et al. (2024) A neural mechanism for learning from delayed postingestive feedback. bioRxiv : the preprint server for biology.

He L, et al. (2024) Differentiation between high-grade gliomas and solitary brain metastases based on multidiffusion MRI model quantitative analysis. Frontiers in oncology, 14, 1401748.

Dubec MJ, et al. (2024) Oxygen-Enhanced MRI Detects Incidence, Onset, and Heterogeneity of Radiation-Induced Hypoxia Modification in HPV-Associated Oropharyngeal

Cancer. Clinical cancer research : an official journal of the American Association for Cancer Research, 30(24), 5620.

Arabi H, et al. (2024) Contrastive Learning vs. Self-Learning vs. Deformable Data Augmentation in Semantic Segmentation of Medical Images. Journal of imaging informatics in medicine, 37(6), 3217.

Uddin MN, et al. (2024) Tensor-valued diffusion MRI detects brain microstructure changes in HIV infected individuals with cognitive impairment. Research square.

Güttsches AK, et al. (2024) Pre- and post-skeletal muscle biopsy quantitative magnetic resonance imaging reveals correlations with histopathological findings. European journal of neurology, 31(12), e16479.

Sieber V, et al. (2024) Automated assessment of brain MRIs in multiple sclerosis patients significantly reduces reading time. Neuroradiology, 66(12), 2171.

Truong NCD, et al. (2024) Two-Stage Training Framework Using Multicontrast MRI Radiomics for IDH Mutation Status Prediction in Glioma. Radiology. Artificial intelligence, 6(4), e230218.

Sushentsev N, et al. (2024) Metabolic imaging across scales reveals distinct prostate cancer phenotypes. Nature communications, 15(1), 5980.

Buzzatti L, et al. (2024) Investigating patellar motion using weight-bearing dynamic CT: normative values and morphological considerations for healthy volunteers. European radiology experimental, 8(1), 106.

Liang C, et al. (2024) Deep learning-based image analysis predicts PD-L1 status from 18F-FDG PET/CT images in non-small-cell lung cancer. Frontiers in oncology, 14, 1402994.

Mei H, et al. (2024) Combined microscope-endoscopy resection of petrous bone cholesteatoma with temporary facial nerve transposition versus nontransposition. European archives of oto-rhino-laryngology : official journal of the European Federation of Oto-Rhino-Laryngological Societies (EUFOS) : affiliated with the German Society for Oto-Rhino-Laryngology - Head and Neck Surgery, 281(6), 2905.

Arrarte Terreros N, et al. (2024) Thrombus Imaging Characteristics to Predict Early Recanalization in Anterior Circulation Large Vessel Occlusion Stroke. Journal of cardiovascular development and disease, 11(4).

Silva RV, et al. (2024) Cortical matrix remodeling as a hallmark of relapsing-remitting neuroinflammation in MR elastography and quantitative MRI. Acta neuropathologica, 147(1), 8.

Raudales R, et al. (2024) Specific and comprehensive genetic targeting reveals brain-wide distribution and synaptic input patterns of GABAergic axo-axonic interneurons. eLife, 13.

Klaassen L, et al. (2024) Quantitative Perfusion-Weighted Magnetic Resonance Imaging in

Uveal Melanoma. Investigative ophthalmology & visual science, 65(11), 17.

Musall S, et al. (2023) Pyramidal cell types drive functionally distinct cortical activity patterns during decision-making. Nature neuroscience, 26(3), 495.

Wu Y, et al. (2023) Reproducibility of APT-weighted CEST-MRI at 3T in healthy brain and tumor across sessions and scanners. Scientific reports, 13(1), 18115.