

Resource Summary Report

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DRAMMS

RRID:SCR_009555

Type: Tool

Proper Citation

DRAMMS (RRID:SCR_009555)

Resource Information

URL: <http://www.rad.upenn.edu/sbia/software/dramms/>

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Description: A software designed for deformable 2D-to-2D and 3D-to-3D image registration. Some typical applications of DRAMMS include, ** Cross-subject registration of the same organ (can be brain, breast, cardiac, etc); ** Mono- and Multi-modality registration (MRI, CT, histology); Longitudinal registration (pediatric brain growth, cancer development, etc); ** Registration under partial missing correspondences (small lesions, tumors, histological cuts). DRAMMS is implemented as a Unix command-line tool. It is fully automatic and easy to use ? users input two images, and DRAMMS will output the registered image and deformation. No need for pre-segmentation of any structures, no need for any prior knowledge, and no need for human initialization or intervention.

Abbreviations: DRAMMS

Synonyms: Deformable Registration via Attribute Matching and Mutual-Saliency Weighting, DRAMMS: Deformable Registration via Attribute Matching and Mutual-Saliency Matching

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

Keywords: analyze, computational neuroscience, linux, macos, magnetic resonance, nifti, posix/unix-like, brain morphometry, general registration, image registration

Availability: BSD License

Resource Name: DRAMMS

Resource ID: SCR_009555

Alternate IDs: nlx_155736

Alternate URLs: <http://www.nitrc.org/projects/dramms>

Record Creation Time: 20220129T080253+0000

Record Last Update: 20260912T195713+0000

Ratings and Alerts

No rating or validation information has been found for DRAMMS.

No alerts have been found for DRAMMS.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 11 mentions in open access literature.

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

Tong MW, et al. (2024) Longitudinal registration of T1-weighted breast MRI: A registration algorithm (FLIRE) and clinical application. Magnetic resonance imaging, 113, 110222.

Lauer A, et al. (2023) Hematopoietic stem-cell gene therapy is associated with restored white matter microvascular function in cerebral adrenoleukodystrophy. Nature communications, 14(1), 1900.

Li X, et al. (2021) Subject-Specific Head Model Generation by Mesh Morphing: A Personalization Framework and Its Applications. Frontiers in bioengineering and biotechnology, 9, 706566.

Li X, et al. (2021) An anatomically detailed and personalizable head injury model: Significance of brain and white matter tract morphological variability on strain. Biomechanics and modeling in mechanobiology, 20(2), 403.

Ferris CF, et al. (2019) Alterations in brain neurocircuitry following treatment with the chemotherapeutic agent paclitaxel in rats. Neurobiology of pain (Cambridge, Mass.), 6, 100034.

Machado I, et al. (2019) Deformable MRI-Ultrasound registration using correlation-based attribute matching for brain shift correction: Accuracy and generality in multi-site data. NeuroImage, 202, 116094.

Cai X, et al. (2019) In search of early neuroradiological biomarkers for Parkinson's Disease: Alterations in resting state functional connectivity and gray matter microarchitecture in PINK1 -/- rats. Brain research, 1706, 58.

Lauer A, et al. (2017) ABCD1 dysfunction alters white matter microvascular perfusion. *Brain : a journal of neurology*, 140(12), 3139.

Evia AM, et al. (2017) Ex-vivo quantitative susceptibility mapping of human brain hemispheres. *PloS one*, 12(12), e0188395.

Sankar A, et al. (2016) Diagnostic potential of structural neuroimaging for depression from a multi-ethnic community sample. *BJPsych open*, 2(4), 247.

Di Donato N, et al. (2016) Mutations in CRADD Result in Reduced Caspase-2-Mediated Neuronal Apoptosis and Cause Megalencephaly with a Rare Lissencephaly Variant. *American journal of human genetics*, 99(5), 1117.