# **Resource Summary Report**

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# Non-Rigid Image Registration Evaluation Project

RRID:SCR\_002505

Type: Tool

## **Proper Citation**

Non-Rigid Image Registration Evaluation Project (RRID:SCR\_002505)

#### Resource Information

URL: http://www.nirep.org/

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**Description:** Project to develop software tools and provide shared image validation databases for rigorous testing of non-rigid image registration algorithms. NIREP will extend the scope of prior validation projects by developing evaluation criteria and metrics using large image populations, using richly annotated image databases, using computer simulated data, and increasing the number and types of evaluation criteria. The goal of this project is to establish, maintain, and endorse a standardized set of relevant benchmarks and metrics for performance evaluation of nonrigid image registration algorithms. Furthermore, these standards will be incorporated into an exportable computer program to automatically evaluate the registration accuracy of nonrigid image registration algorithms.

**Abbreviations: NIREP** 

**Synonyms:** Non-Rigid Image Registration Evaluation Project, Non-Rigid Image Registration Evaluation Project (NIREP)

**Resource Type:** narrative resource, database, data or information resource, standard specification, software resource

Keywords: magnetic resonance, registration software

Funding: NIBIB R33 EB004126

Availability: Free, Non-commercial

Resource Name: Non-Rigid Image Registration Evaluation Project

Resource ID: SCR\_002505

Alternate IDs: nlx\_155904

Alternate URLs: http://www.nitrc.org/projects/nirep

**Record Creation Time:** 20220129T080213+0000

**Record Last Update:** 20250517T055536+0000

### **Ratings and Alerts**

No rating or validation information has been found for Non-Rigid Image Registration Evaluation Project.

No alerts have been found for Non-Rigid Image Registration Evaluation Project.

#### Data and Source Information

Source: SciCrunch Registry

## **Usage and Citation Metrics**

We found 7 mentions in open access literature.

**Listed below are recent publications.** The full list is available at <u>dkNET</u>.

Kini LG, et al. (2016) Data integration: Combined imaging and electrophysiology data in the cloud. NeuroImage, 124(Pt B), 1175.

Philippi N, et al. (2015) Different Temporal Patterns of Specific and General Autobiographical Memories across the Lifespan in Alzheimer's Disease. Behavioural neurology, 2015, 963460.

Cook PA, et al. (2014) Relating brain anatomy and cognitive ability using a multivariate multimodal framework. NeuroImage, 99, 477.

Tustison NJ, et al. (2013) Instrumentation bias in the use and evaluation of scientific software: recommendations for reproducible practices in the computational sciences. Frontiers in neuroscience, 7, 162.

Wu G, et al. (2010) TPS-HAMMER: improving HAMMER registration algorithm by soft correspondence matching and thin-plate splines based deformation interpolation. NeuroImage, 49(3), 2225.

Klein A, et al. (2009) Evaluation of 14 nonlinear deformation algorithms applied to human brain MRI registration. NeuroImage, 46(3), 786.

Ellingsen LM, et al. (2009) Mjolnir: extending HAMMER using a diffusion transformation model and histogram equalization for deformable image registration. International journal of biomedical imaging, 2009, 281615.