Resource Summary Report

Generated by ASWG on Aug 3, 2026

VisuAlign

RRID:SCR_017978
Type: Tool

Proper Citation

VisuAlign (RRID:SCR_017978)

Resource Information

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

Proper Citation: VisuAlign (RRID:SCR_017978)

Description: Software tool for applying user guided nonlinear refinements (inplane) to existing, affine 2D-to-3D registration. Used for precise quantitative analysis of residual anatomical variability among test subjects after registration with QuickNII. VisuAlign is part of the QUINT workflow.

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

Defining Citation: PMID:41069395

Keywords: Nonlinear refinement, 2D, 3D, registration, quantitative analysis, residual anatomical variability

Funding: European Union’s Horizon 2020 Framework Programme for Research and Innovation under the Framework Partnership Agreement No. 650003 (HBP FPA) and the European Union’s Horizon Europe Programme for Research Infrastructures Grant Agreement No. 101147319 (EBRAINS 2.0).

Availability: Free, Available for download, Freely available

Resource Name: VisuAlign

Resource ID: SCR_017978

Alternate URLs: https://visualign.readthedocs.io; https://github.com/Tevemadar/VisuAlign, https://github.com/Neural-Systems-at-UIO/VisuAlign

License: MIT, Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International

Record Creation Time: 20220129T080338+0000

Record Last Update: 20260803T040738+0000

Ratings and Alerts

No rating or validation information has been found for VisuAlign.

No alerts have been found for VisuAlign.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 36 mentions in open access literature.

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

Carey H, et al. (2025) DeMBA: a developmental atlas for navigating the mouse brain in space and time. Nature communications, 16(1), 8108.

Moan K, et al. (2025) Differences in Cajal-Retzius Cell Density and Postnatal Persistence Across Cortical Areas Revealed by a Novel Intersectional Genetic Labeling Approach. The Journal of comparative neurology, 533(11), e70106.

Sungeelee S, et al. (2025) A genetically defined pontine nucleus essential for ingestion in mice. Proceedings of the National Academy of Sciences of the United States of America, 122(29), e2411174122.

Messore F, et al. (2025) An orexin-sensitive subpopulation of layer 6 neurons regulates cortical excitability and anxiety behaviour. Translational psychiatry, 15(1), 147.

Soto-Avellaneda A, et al. (2025) Helicobacter pylori infection and ?-synuclein pathology drive parallel neurodegenerative pathways in the substantia nigra. Journal of neuroinflammation, 22(1), 293.

Tieze SM, et al. (2025) Molecular elucidation of brain lipofuscin in aging and Neuronal Ceroid Lipofuscinosis. Research square.

Huang ML, et al. (2025) Misclassification in memory modification in AppNL-G-F knock-in mouse model of Alzheimer's disease. eLife, 14.

Kasen A, et al. (2025) Seed structure and phosphorylation in the fuzzy coat impact tau seeding competency. Nature communications, 16(1), 9240.

Mohar B, et al. (2025) DELTA: a method for brain-wide measurement of synaptic protein turnover reveals localized plasticity during learning. Nature neuroscience, 28(5), 1089.

Manjila SB, et al. (2025) Brain-wide connectivity and novelty response of the dorsal endopiriform nucleus in mice. Cell reports, 44(7), 115827.

Puchades MA, et al. (2025) Software and pipelines for registration and analyses of rodent brain image data in reference atlas space. Frontiers in neuroinformatics, 19, 1629388.

Kim J, et al. (2024) Bidirectional Control of Emotional Behaviors by Excitatory and Inhibitory Neurons in the Orbitofrontal Cortex. Experimental neurobiology, 33(5), 225.

Jiang Z, et al. (2024) Dopaminergic Neurons in Zona Incerta Drives Appetitive Self-Grooming. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 11(36), e2308974.

Blixhavn CH, et al. (2024) The Locare workflow: representing neuroscience data locations as geometric objects in 3D brain atlases. Frontiers in neuroinformatics, 18, 1284107.

Goralski TM, et al. (2024) Spatial transcriptomics reveals molecular dysfunction associated with cortical Lewy pathology. Nature communications, 15(1), 2642.

Vadisiute A, et al. (2024) Glial cells undergo rapid changes following acute chemogenetic manipulation of cortical layer 5 projection neurons. Communications biology, 7(1), 1286.

Vatsa N, et al. (2024) Network analysis of ?-synuclein pathology progression reveals p21-activated kinases as regulators of vulnerability. bioRxiv : the preprint server for biology.

Gurdon B, et al. (2024) Detecting the effect of genetic diversity on brain composition in an Alzheimer's disease mouse model. Communications biology, 7(1), 605.

Kleven H, et al. (2024) Comparison of basal ganglia regions across murine brain atlases using metadata models and the Waxholm Space. Scientific data, 11(1), 1036.

Sokratian A, et al. (2024) Mouse ?-synuclein fibrils are structurally and functionally distinct from human fibrils associated with Lewy body diseases. Science advances, 10(44), eadq3539.