# Resource Summary Report

Generated by dkNET on Sep 16, 2026

## Seg3D

RRID:SCR_002552
Type: Tool

### Proper Citation

Seg3D (RRID:SCR_002552)

### Resource Information

**URL:** http://www.seg3d.org

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**Description:** A free volume processing segmenting tool that combines a flexible manual interface with powerful image processing and segmentation algorithms. Users can explore and label image volumes using slice windows and 3D volume rendering.

**Abbreviations:** Seg3D

**Resource Type:** data processing software, data visualization software, image analysis software, image processing software, rendering software, segmentation software, software application, software resource

**Defining Citation:** PMID:29083867

**Keywords:** analyze, c++, dicom, image display, linux, macos, microsoft, magnetic resonance, nrrd, posix/unix-like, rendering, segmentation, three dimensional display, visualization, volume rendering, win32 (ms windows), windows

**Funding:** NIGMS 8 P41 GM103545-15

**Availability:** Free, Available for download, Freely available

**Resource Name:** Seg3D

**Resource ID:** SCR_002552

**Alternate IDs:** nlx_155959

**Alternate URLs:** http://www.nitrc.org/projects/seg3d

**License:** MIT License

**Record Creation Time:** 20220129T080214+0000

**Record Last Update:** 20260912T200008+0000

## Ratings and Alerts

No rating or validation information has been found for Seg3D.

No alerts have been found for Seg3D.

## Data and Source Information

**Source:** SciCrunch Registry

## Usage and Citation Metrics

We found 106 mentions in open access literature.

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


Tanner LCR, et al. (2026) Uncertainty quantification via polynomial chaos expansion of myocardial fibre orientation and cardiac activation patterns. The Journal of physiology, 604(13), 5440.

Askew GR, et al. (2026) A Pax7::Foxo1 conditional mouse strain. Skeletal muscle, 16(1).

Adams-Tew SI, et al. (2026) Impact of breast biopsy markers on magnetic resonance-guided focused ultrasound. International journal of hyperthermia : the official journal of European Society for Hyperthermic Oncology, North American Hyperthermia Group, 43(1), 2632351.

Koivuholma A, et al. (2025) A pilot study comparing three-dimensional models of tumor histopathology and magnetic resonance imaging. Scientific reports, 15(1), 1888.

Yepes MF, et al. (2025) Noninvasive Targeted Temperature Management of the Inner Ear: Numerical Simulations and Experimental Measurements in a Human Cadaver Model. Otology & neurotology : official publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology, 46(5), 598.

Rocheleau CJ, et al. (2025) Use of an anatomical atlas in real-time EIT reconstructions of ventilation and pulsatile perfusion in preterm infants. Scientific reports, 15(1), 29622.

Prithiviraj S, et al. (2025) Compositional editing of extracellular matrices by CRISPR/Cas9 engineering of human mesenchymal stem cell lines. eLife, 13.

Giardini F, et al. (2025) Correlative imaging integrates electrophysiology with three-dimensional murine heart reconstruction to reveal electrical coupling between cell types. Nature cardiovascular research, 4(11), 1466.

Wang C, et al. (2025) Structure, Mechanics, and Mechanobiology of Fibrocartilage Pericellular Matrix Mediated by Type V Collagen. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 12(32), e14750.

Wang C, et al. (2024) Structure-Mechanics Principles and Mechanobiology of Fibrocartilage Pericellular Matrix: A Pivotal Role of Type V Collagen. bioRxiv : the preprint server for biology.

Piastra MC, et al. (2024) How to assess the accuracy of volume conduction models? A validation study with stereotactic EEG data. Frontiers in human neuroscience, 18, 1279183.

Murray SB, et al. (2024) Assessing midbrain neuromelanin and its relationship to reward learning in anorexia nervosa: Stage 1 of a registered report. Brain and behavior, 14(6), e3573.

Heller DT, et al. (2024) Astrocyte ensheathment of calyx-forming axons of the auditory brainstem precedes accelerated expression of myelin genes and myelination by oligodendrocytes. The Journal of comparative neurology, 532(2), e25552.

Spirou GA, et al. (2023) High-resolution volumetric imaging constrains compartmental models to explore synaptic integration and temporal processing by cochlear nucleus globular bushy cells. eLife, 12.

Hananouchi T, et al. (2023) Determining the Relationship between Mechanical Properties and Quantitative Magnetic Resonance Imaging of Joint Soft Tissues Using Patient-Specific Templates. Bioengineering (Basel, Switzerland), 10(9).

Stouffer KM, et al. (2023) Early amygdala and ERC atrophy linked to 3D reconstruction of rostral neurofibrillary tau tangle pathology in Alzheimer's disease. NeuroImage. Clinical, 38, 103374.

Brandebura AN, et al. (2022) Transcriptional profiling reveals roles of intercellular Fgf9 signaling in astrocyte maturation and synaptic refinement during brainstem development. The Journal of biological chemistry, 298(8), 102176.

Stouffer KM, et al. (2022) Projective Diffeomorphic Mapping of Molecular Digital Pathology with Tissue MRI. Communications engineering, 1.

Karabelas E, et al. (2022) Global Sensitivity Analysis of Four Chamber Heart Hemodynamics Using Surrogate Models. IEEE transactions on bio-medical engineering, 69(10), 3216.

Mendonca Costa C, et al. (2022) Determining anatomical and electrophysiological detail requirements for computational ventricular models of porcine myocardial infarction. Computers in biology and medicine, 141, 105061.