# Resource Summary Report

Generated by RRID on Apr 8, 2025

## Seg3D

RRID:SCR_002552
Type: Tool

### Proper Citation

Seg3D (RRID:SCR_002552)

### Resource Information

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

**Proper Citation:** Seg3D (RRID:SCR_002552)

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

**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:** MIT License

**Resource Name:** Seg3D

**Resource ID:** SCR_002552

**Alternate IDs:** nlx_155959

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

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

**Record Last Update:** 20250407T215328+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 95 mentions in open access literature.

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

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

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.

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.

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.

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

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.

Chen Y, et al. (2022) In vitro and in vivo study of the pathogenic role of PPAR? in experimental periodontitis. Journal of applied oral science : revista FOB, 30, e20220076.

Wang KM, et al. (2022) Technical note: Evaluation of a silicone-based custom bolus for radiation therapy of a superficial pelvic tumor. Journal of applied clinical medical physics, 23(4), e13538.

Augustin CM, et al. (2021) A computationally efficient physiologically comprehensive 3D-0D closed-loop model of the heart and circulation. Computer methods in applied mechanics and engineering, 386, 114092.

Köhler L, et al. (2021) Volumetric measurements of paranasal sinuses and examination of sinonasal communication in healthy Shetland ponies: anatomical and morphometric characteristics using computed tomography. BMC veterinary research, 17(1), 41.

Choi YJ, et al. (2021) 3D-Printed Ophthalmic-Retrobulbar-Anesthesia Simulator: Mimicking Anatomical Structures and Providing Tactile Sensations. IEEE journal of translational engineering in health and medicine, 9, 3800206.

Qian S, et al. (2021) An in-silico assessment of efficacy of two novel intra-cardiac electrode configurations versus traditional anti-tachycardia pacing therapy for terminating sustained ventricular tachycardia. Computers in biology and medicine, 139, 104987.

Moss JJ, et al. (2021) Autophagy coordinates chondrocyte development and early joint formation in zebrafish. FASEB journal : official publication of the Federation of American Societies for Experimental Biology, 35(11), e22002.

Yankova G, et al. (2021) Cerebral arterial architectonics and CFD simulation in mice with type 1 diabetes mellitus of different duration. Scientific reports, 11(1), 3969.

Taberna GA, et al. (2021) Automated Head Tissue Modelling Based on Structural Magnetic Resonance Images for Electroencephalographic Source Reconstruction. Neuroinformatics, 19(4), 585.