

Resource Summary Report

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VTK

RRID:SCR_015013

Type: Tool

Proper Citation

VTK (RRID:SCR_015013)

Resource Information

URL: <http://www.vtk.org>

Proper Citation: VTK (RRID:SCR_015013)

Description: Cross-platform visualization software system for 3D computer graphics, image processing, and data visualization. Various visualization algorithms and advanced modeling techniques are supported within VTK, as well as parallel processing and interoperability with select databases.

Synonyms: VTK 7.0.0, Visualization Toolkit, VTK 7.1

Resource Type: data visualization software, software resource, software application, image processing software, data processing software, software toolkit

Keywords: open source visualization toolkit, visualization system, 3d computer graphics, image processing, FASEB list

Availability: Open source, Available for download, Acknowledgement requested

Resource Name: VTK

Resource ID: SCR_015013

Alternate URLs: <https://gitlab.kitware.com/vtk/vtk>

License: BSD License

License URLs: <http://www.vtk.org/licensing/>

Record Creation Time: 20220129T080323+0000

Record Last Update: 20260728T043447+0000

Ratings and Alerts

No rating or validation information has been found for VTK.

No alerts have been found for VTK.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 88 mentions in open access literature.

Listed below are recent publications. The full list is available at [nidm-terms](#) .

Fumagalli I, et al. (2025) A reduced 3D-0D fluid-structure interaction model of the aortic valve that includes leaflet curvature. *Biomechanics and modeling in mechanobiology*, 24(4), 1169.

Cao Z, et al. (2025) Autonomous surgical planning of mandibular angle reduction based on anatomical landmarks and osteotomy plane detection. *Scientific reports*, 15(1), 5842.

Qi Z, et al. (2024) Head model dataset for mixed reality navigation in neurosurgical interventions for intracranial lesions. *Scientific data*, 11(1), 538.

Heiland R, et al. (2024) PhysiCell Studio: a graphical tool to make agent-based modeling more accessible. *GigaByte (Hong Kong, China)*, 2024, gigabyte128.

Sun T, et al. (2023) Dbh+ catecholaminergic cardiomyocytes contribute to the structure and function of the cardiac conduction system in murine heart. *Nature communications*, 14(1), 7801.

Park BD, et al. (2023) Longitudinal Degradation of Pavement Marking Detectability for Mobile LiDAR Sensing Technology in Real-World Use. *Sensors (Basel, Switzerland)*, 23(13).

Nolte D, et al. (2023) 3D shape reconstruction of the femur from planar X-ray images using statistical shape and appearance models. *Biomedical engineering online*, 22(1), 30.

Zolfaghari H, et al. (2023) Wall shear stress and pressure patterns in aortic stenosis patients with and without aortic dilation captured by high-performance image-based computational fluid dynamics. *PLoS computational biology*, 19(10), e1011479.

Duetschler A, et al. (2022) Synthetic 4DCT(MRI) lung phantom generation for 4D radiotherapy and image guidance investigations. *Medical physics*, 49(5), 2890.

Waldmann M, et al. (2022) An effective simulation- and measurement-based workflow for enhanced diagnostics in rhinology. *Medical & biological engineering & computing*, 60(2), 365.

- Ruckli AC, et al. (2022) Automated quantification of cartilage quality for hip treatment decision support. *International journal of computer assisted radiology and surgery*, 17(11), 2011.
- Berberoglu E, et al. (2021) In-silico study of accuracy and precision of left-ventricular strain quantification from 3D tagged MRI. *PloS one*, 16(11), e0258965.
- Kaisarly D, et al. (2021) Effects of flowable liners on the shrinkage vectors of bulk-fill composites. *Clinical oral investigations*, 25(8), 4927.
- Majka P, et al. (2021) Histology-Based Average Template of the Marmoset Cortex With Probabilistic Localization of Cytoarchitectural Areas. *NeuroImage*, 226, 117625.
- Schneider-Mizell CM, et al. (2021) Structure and function of axo-axonic inhibition. *eLife*, 10.
- Claudi F, et al. (2021) Visualizing anatomically registered data with brainrender. *eLife*, 10.
- Emmi A, et al. (2021) 3D Reconstruction of the Morpho-Functional Topography of the Human Vagal Trigone. *Frontiers in neuroanatomy*, 15, 663399.
- Grothausmann R, et al. (2021) Combination of μ CT and light microscopy for generation-specific stereological analysis of pulmonary arterial branches: a proof-of-concept study. *Histochemistry and cell biology*, 155(2), 227.
- Vernikouskaya I, et al. (2021) 3D-XGuide: open-source X-ray navigation guidance system. *International journal of computer assisted radiology and surgery*, 16(1), 53.
- Deng S, et al. (2021) A Virtual Reality System for Improved Image-Based Planning of Complex Cardiac Procedures. *Journal of imaging*, 7(8).