

Resource Summary Report

Generated by PRECISE-TBI on Jul 31, 2026

NiftySim

RRID:SCR_006591

Type: Tool

Proper Citation

NiftySim (RRID:SCR_006591)

Resource Information

URL: <http://sourceforge.net/projects/niftysim/>

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Description: A high-performance nonlinear finite element solver. A key feature is the option of GPU-based execution, which allows the solver to significantly out-perform equivalent commercial packages.

Abbreviations: NiftySim

Synonyms: Nifty Sim

Resource Type: software resource

Keywords: pet, spect

Availability: BSD License

Resource Name: NiftySim

Resource ID: SCR_006591

Alternate IDs: nlx_155900

Alternate URLs: <http://www.nitrc.org/projects/niftysim>

Record Creation Time: 20220129T080237+0000

Record Last Update: 20260725T190626+0000

Ratings and Alerts

No rating or validation information has been found for NiftySim.

No alerts have been found for NiftySim.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 3 mentions in open access literature.

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

Pacheco G, et al. (2025) Optimization and validation of a mechanical compression model for digital breast phantoms in mammography and tomosynthesis simulations. Medical physics, 52(7), e17980.

Chen JH, et al. (2019) Evaluation of breast stiffness measured by ultrasound and breast density measured by MRI using a prone-supine deformation model. Biomarker research, 7, 20.

Johnsen SF, et al. (2015) NiftySim: A GPU-based nonlinear finite element package for simulation of soft tissue biomechanics. International journal of computer assisted radiology and surgery, 10(7), 1077.