

Resource Summary Report

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Monte Carlo eXtreme

RRID:SCR_007001

Type: Tool

Proper Citation

Monte Carlo eXtreme (RRID:SCR_007001)

Resource Information

URL: <http://mcx.sourceforge.net/>

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Description: A Monte Carlo simulation software for photon migration in 3D turbid media. It uses Graphics Processing Units (GPU) based massively parallel computing techniques and is extremely fast compared to the traditional single-threaded CPU-based simulations. Using an nVidia 8800GT graphics card (14MP/114Cores), the acceleration is about 300x~400x compared to a single core of Xeon 5120 CPU; this ratio can be as high as 700x with a GTX 280 GPU and 1400x with a GTX 470.

Abbreviations: MCX

Synonyms: Monte Carlo eXtreme (MCX)

Resource Type: simulation software, software resource, software application

Keywords: c, console (text based), macos, microsoft, modeling, monte carlo, optical imaging, other programming language, posix/unix-like, win32 (ms windows), windows

Funding:

Availability: GNU General Public License

Resource Name: Monte Carlo eXtreme

Resource ID: SCR_007001

Alternate IDs: nlx_155817

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

Record Creation Time: 20220129T080239+0000

Record Last Update: 20250503T055854+0000

Ratings and Alerts

No rating or validation information has been found for Monte Carlo eXtreme.

No alerts have been found for Monte Carlo eXtreme.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 2 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Khateeb K, et al. (2022) A versatile toolbox for studying cortical physiology in primates. Cell reports methods, 2(3).

Brigadoi S, et al. (2014) A 4D neonatal head model for diffuse optical imaging of pre-term to term infants. NeuroImage, 100, 385.