**Computational Morphometry Toolkit**

RRID:SCR_002234  
Type: Tool

**Proper Citation**

Computational Morphometry Toolkit (RRID:SCR_002234)

**Resource Information**

**URL:** [http://neuro.debian.net/pkgs/cmtk.html](http://neuro.debian.net/pkgs/cmtk.html)

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**Description:** A software toolkit for computational morphometry of biomedical images, CMTK comprises a set of command line tools and a back-end general-purpose library for processing and I/O. The command line tools primarily provide the following functionality: registration (affine and nonrigid; single and multi-channel; pairwise and groupwise), image correction (MR bias field estimation; interleaved image artifact correction; EPI unwarping), processing (filters; combination of segmentations via voting and STAPLE; shape-based averaging), statistics (t-tests; general linear model). CMTK is implemented in C++ with parallel processing using POSIX Threads (SMP), OpenMP (SMP), Grand Central Dispatch (SMP), and CUDA (GPU). Supported file formats include Analyze (r/w), NIFTI (r/w), Nrrd (r/w), DICOM (read), BioRad (read). Data exchange with other toolkits, such as ITK, FSL, AFNI, SPM, etc. is thus easily accomplished.

**Abbreviations:** CMTK

**Synonyms:** Computational Morphometry Toolkit (CMTK)

**Resource Type:** software application, software resource, software toolkit
Keywords: reusable library, analyze, anatomic, artifact removal, atlas application, c, c++, console (text based), cygwin, dicom, domain independent, format conversion, image display, image reconstruction, image-to-image, labeling, linear, linux, macos, microsoft, magnetic resonance, nifti-1, nrrd, posix/unix-like, principal component analysis, region of interest, registration, regression, resampling, segmentation, sh/bash, spatial transformation, statistical operation, sunos/solaris, two dimensional display, unix shell, visualization, warping, win32 (ms windows), windows, workflow

Availability: Available for download

Resource Name: Computational Morphometry Toolkit

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Alternate URLs: http://www.nitrc.org/projects/cmtk

Ratings and Alerts

- 4.5 / 5 (3 votes) Rated at NITRC http://www.nitrc.org/projects/cmtk

No alerts have been found for Computational Morphometry Toolkit.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 20 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.


