

Resource Summary Report

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LONI Pipeline Processing Environment

RRID:SCR_001161

Type: Tool

Proper Citation

LONI Pipeline Processing Environment (RRID:SCR_001161)

Resource Information

URL: <http://www.loni.usc.edu/Software/Pipeline>

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Description: A free workflow application primarily aimed at neuroimaging researchers that allows users to easily describe their executables in a graphical user interface (ie. create a module) and connect them together to create complex analyses all without having to code a single line in a scripting language. The Pipeline Client runs on your PC/Mac/Linux computer upon which you can create sophisticated processing workflows using a variety of commonly available executable tools (e.g. FSL, AIR, FreeSurfer, AFNI, Diffusion Toolkit, etc). The Distributed Pipeline Server can be installed on your Linux cluster and you can submit processing jobs directly to your own compute systems. Once you have created a module for use in the LONI Pipeline, you can save it into your personal library and reuse it in other workflows you create by simply dragging and dropping it in. Because the LONI Pipeline is written in Java, you can work in whatever operating system suits you best. If there are tools that you need that can only work on another operating system, you can install a Pipeline server on that computer and connect from your client to do processing and analysis remotely.

Abbreviations: LONI Pipeline

Synonyms: LONI Pipeline Environment

Resource Type: data processing software, software application, software resource, workflow software

Defining Citation: [PMID:12880830](#)

Keywords: workflow, neuroscience, afni, afni_brik, analyze, bshort, bfloat, computational neuroscience, dicom, imaging genomics, java, linux, macos, microsoft, minc, minc2, nifti, pet, spect, posix/unix-like, sunos/solaris, windows, windows nt/2000, atlas, birn, ccb, functional, na-mic, registration, segmentation, statistical, surface analysis, visual processing environment, volume, warping, image processing

Funding: NCRR P41 RR013642;
NIMH R01 MH71940;
NCRR U54 RR021813

Availability: Free, Available for download, Freely available

Resource Name: LONI Pipeline Processing Environment

Resource ID: SCR_001161

Alternate IDs: nif-0000-00322

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

Old URLs: <http://www.loni.ucla.edu/NCRR/Software/Pipeline.html>

Record Creation Time: 20220129T080205+0000

Record Last Update: 20260905T132430+0000

Ratings and Alerts

No rating or validation information has been found for LONI Pipeline Processing Environment.

No alerts have been found for LONI Pipeline Processing Environment.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 11 mentions in open access literature.

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

Budin F, et al. (2013) Fully automated rodent brain MR image processing pipeline on a Midas server: from acquired images to region-based statistics. *Frontiers in neuroinformatics*, 7, 15.

Torri F, et al. (2012) Next generation sequence analysis and computational genomics using graphical pipeline workflows. *Genes*, 3(3), 545.

Van Horn JD, et al. (2012) Mapping connectivity damage in the case of Phineas Gage. *PloS one*, 7(5), e37454.

Bellec P, et al. (2012) The pipeline system for Octave and Matlab (PSOM): a lightweight scripting framework and execution engine for scientific workflows. *Frontiers in neuroinformatics*, 6, 7.

Poline JB, et al. (2012) Data sharing in neuroimaging research. *Frontiers in neuroinformatics*, 6, 9.

Dinov ID, et al. (2011) Applications of the pipeline environment for visual informatics and genomics computations. *BMC bioinformatics*, 12, 304.

Dinov I, et al. (2010) Neuroimaging study designs, computational analyses and data provenance using the LONI pipeline. *PloS one*, 5(9).

Ooi C, et al. (2009) CamBAfx: Workflow Design, Implementation and Application for Neuroimaging. *Frontiers in neuroinformatics*, 3, 27.

Joshi SH, et al. (2009) Interactive exploration of neuroanatomical meta-spaces. *Frontiers in neuroinformatics*, 3, 38.

Keator DB, et al. (2009) Derived Data Storage and Exchange Workflow for Large-Scale Neuroimaging Analyses on the BIRN Grid. *Frontiers in neuroinformatics*, 3, 30.

Dinov ID, et al. (2009) Efficient, Distributed and Interactive Neuroimaging Data Analysis Using the LONI Pipeline. *Frontiers in neuroinformatics*, 3, 22.