Nipype

RRID:SCR_002502
Type: Tool

Proper Citation

Nipype (RRID:SCR_002502)

Resource Information

**URL:** [http://nipy.org/nipype/](http://nipy.org/nipype/)

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**Description:** A package for writing fMRI analysis pipelines and interfacing with external analysis packages (SPM, FSL, AFNI). Current neuroimaging software offer users an incredible opportunity to analyze their data in different ways, with different underlying assumptions. However, this has resulted in a heterogeneous collection of specialized applications without transparent interoperability or a uniform operating interface. Nipype, an open-source, community-developed initiative under the umbrella of Nipy, is a Python project that solves these issues by providing a uniform interface to existing neuroimaging software and by facilitating interaction between these packages within a single workflow. Nipype provides an environment that encourages interactive exploration of algorithms from different packages (e.g., SPM, FSL), eases the design of workflows within and between packages, and reduces the learning curve necessary to use different packages. Nipype is creating a collaborative platform for neuroimaging software development in a high-level language and addressing limitations of existing pipeline systems.

**Abbreviations:** Nipype

**Synonyms:** Nipype: Neuroimaging in Python Pipeline and Interfaces, NIPY Pipeline and Interfaces

**Resource Type:** software application, software resource

**Defining Citation:** PMID:21897815
**Keywords:** magnetic resonance, python, workflow, analysis, pipeline, interface, data processing, neuroimaging

**Availability:** BSD License

**Resource Name:** Nipype

**Resource ID:** SCR_002502

**Alternate IDs:** nlx_155901

**Alternate URLs:** http://www.nitrc.org/projects/nipype

**Record Creation Time:** 20220129T080213+0000

**Record Last Update:** 20240629T053121+0000

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**Ratings and Alerts**

No rating or validation information has been found for Nipype.

No alerts have been found for Nipype.

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**Data and Source Information**

**Source:** SciCrunch Registry

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**Usage and Citation Metrics**

We found 483 mentions in open access literature.

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

Liao J, et al. (2024) Dissociable contributions of the hippocampus and orbitofrontal cortex to representing task space in a social context. Cerebral cortex (New York, N.Y. : 1991), 34(1).

Demidenko MI, et al. (2024) A multi-sample evaluation of the measurement structure and function of the modified monetary incentive delay task in adolescents. Developmental cognitive neuroscience, 65, 101337.

Heukamp NJ, et al. (2024) Adolescents' pain-related ontogeny shares a neural basis with adults' chronic pain in basothalamo-cortical organization. iScience, 27(2), 108954.

Singletary NM, et al. (2024) The parieto-occipital cortex is a candidate neural substrate for the human ability to approximate Bayesian inference. Communications biology, 7(1), 165.


Smith DV, et al. (2024) An fMRI Dataset on Social Reward Processing and Decision Making in Younger and Older Adults. Scientific data, 11(1), 158.

Choi H, et al. (2024) Identifying subgroups of eating behavior traits unrelated to obesity using functional connectivity and feature representation learning. Human brain mapping, 45(1), e26581.


Bertocci MA, et al. (2024) Neural markers of mania that distinguish inpatient adolescents with bipolar disorder from those with other psychopathology. Psychiatry research, 333, 115747.

Olino TM, et al. (2024) Neural activation and connectivity in offspring of depressed mothers during monetary and social reward tasks. Biological psychology, 185, 108724.

Mizzi S, et al. (2024) Resting-state amygdala subregion and precuneus connectivity provide evidence for a dimensional approach to studying social anxiety disorder. Translational psychiatry, 14(1), 147.

Neuropsychological Society : JINS, 30(3), 220.
