

Resource Summary Report

Generated by [NIF](#) on Aug 3, 2026

Brain Imaging Analysis Kit

RRID:SCR_014824

Type: Tool

Proper Citation

Brain Imaging Analysis Kit (RRID:SCR_014824)

Resource Information

URL: <https://brainiak.org>

Proper Citation: Brain Imaging Analysis Kit (RRID:SCR_014824)

Description: Open source software package of Python modules for neuroscience, primarily focused on functional Magnetic Resonance Imaging (fMRI) analysis. Used for analyzing neuroimaging data.

Abbreviations: BrainIAK

Synonyms: BrainIAK, Brain Imaging Analysis Kit, Brain Imaging Analysis Kit (BrainIAK)

Resource Type: software toolkit, software resource, data processing software, software application, image analysis software

Keywords: brain, python, module, imaging, fmri, data, analysis, neuroimaging

Availability: Free, Available for download, Freely available

Resource Name: Brain Imaging Analysis Kit

Resource ID: SCR_014824

Alternate URLs: <https://github.com/brainiak/brainiak>

License: Apache License 2.0

Record Creation Time: 20220129T080322+0000

Record Last Update: 20260803T040704+0000

Ratings and Alerts

No rating or validation information has been found for Brain Imaging Analysis Kit.

No alerts have been found for Brain Imaging Analysis Kit.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 26 mentions in open access literature.

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

Li Q, et al. (2025) Effects of progressive aerobic training on neural synchrony and functional connectivity in internet gaming disorder: a randomized controlled fMRI study. BMC psychiatry, 25(1), 986.

Su H, et al. (2025) Neural dynamics of spontaneous memory recall and future thinking in the continuous flow of thoughts. Nature communications, 16(1), 6433.

Marapin RS, et al. (2025) Multivariate Pattern Analysis of fMRI Reveals Striato-Cortical Network Changes in Myoclonus-Dystonia. European journal of neurology, 32(4), e70085.

Tan L, et al. (2025) The medial and lateral orbitofrontal cortex jointly represent the cognitive map of task space. Communications biology, 8(1), 163.

Owen LLW, et al. (2024) High-level cognition is supported by information-rich but compressible brain activity patterns. Proceedings of the National Academy of Sciences of the United States of America, 121(35), e2400082121.

Cheong JH, et al. (2023) Synchronized affect in shared experiences strengthens social connection. Communications biology, 6(1), 1099.

Zuo ZX, et al. (2023) A machine learning approach towards the differentiation between interoceptive and exteroceptive attention. The European journal of neuroscience, 58(2), 2523.

Li YP, et al. (2023) Perception and memory retrieval states are reflected in distributed patterns of background functional connectivity. NeuroImage, 276, 120221.

Mennen AC, et al. (2022) Real-time neurofeedback to alter interpretations of a naturalistic narrative. Neuroimage. Reports, 2(3).

Snoek L, et al. (2021) The Amsterdam Open MRI Collection, a set of multimodal MRI datasets for individual difference analyses. Scientific data, 8(1), 85.

Meshulam M, et al. (2021) Neural alignment predicts learning outcomes in students taking an introduction to computer science course. Nature communications, 12(1), 1922.

Owen LLW, et al. (2021) High-level cognition during story listening is reflected in high-order dynamic correlations in neural activity patterns. *Nature communications*, 12(1), 5728.

Nastase SA, et al. (2021) The "Narratives" fMRI dataset for evaluating models of naturalistic language comprehension. *Scientific data*, 8(1), 250.

Kumar M, et al. (2021) BrainIAK: The Brain Imaging Analysis Kit. *Aperture neuro*, 1(4).

Antony JW, et al. (2021) Behavioral, Physiological, and Neural Signatures of Surprise during Naturalistic Sports Viewing. *Neuron*, 109(2), 377.

Cai MB, et al. (2020) Incorporating structured assumptions with probabilistic graphical models in fMRI data analysis. *Neuropsychologia*, 144, 107500.

Ellis CT, et al. (2020) Facilitating open-science with realistic fMRI simulation: validation and application. *PeerJ*, 8, e8564.

Nastase SA, et al. (2020) Leveraging shared connectivity to aggregate heterogeneous datasets into a common response space. *NeuroImage*, 217, 116865.

Weaverdyck ME, et al. (2020) Tools of the Trade Multivoxel pattern analysis in fMRI: a practical introduction for social and affective neuroscientists. *Social cognitive and affective neuroscience*, 15(4), 487.

Kumar M, et al. (2020) BrainIAK tutorials: User-friendly learning materials for advanced fMRI analysis. *PLoS computational biology*, 16(1), e1007549.