

Resource Summary Report

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seqNMF

RRID:SCR_017068

Type: Tool

Proper Citation

seqNMF (RRID:SCR_017068)

Resource Information

URL: <https://github.com/FeeLab/seqNMF>

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Description: Software tool for unsupervised discovery of sequential structure. Used to detect sequences in neural data generated by internal behaviors, such as animal thinking or sleeping. Used for unsupervised discovery of temporal sequences in high dimensional datasets in neuroscience without reference to external markers.

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

Defining Citation: [PMID:30719973](#)

Keywords: sequence, structure, high, dimension, dataset, neuroscience, repeated, sequential, pattern, data

Funding: Department of Energy ;
Labor and Economic Growth Computational Science Graduate Fellowship ;
G Harold and Leila Y. Mathers Foundation ;
NIBIB T32 EB019940;
NIDCD R01 DC009183;
NIMH R25 MH062204;
NINDS U19 NS10 4648;
Simons Foundation Simons Collaboration for the Global Brain ;
U.S. Department of Defense NDSEG Fellowship program

Availability: Free, Available for download, Freely available

Resource Name: seqNMF

Resource ID: SCR_017068

License: MIT License

Record Creation Time: 20220129T080333+0000

Record Last Update: 20260905T132818+0000

Ratings and Alerts

No rating or validation information has been found for seqNMF.

No alerts have been found for seqNMF.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Ohno S, et al. (2025) The medial prefrontal cortex encodes procedural rules as sequential neuronal activity dynamics. *Molecular brain*, 18(1), 56.

Zhang Y, et al. (2024) Long-term mesoscale imaging of 3D intercellular dynamics across a mammalian organ. *Cell*, 187(21), 6104.

Costa RM, et al. (2022) Neuronal population activity dynamics reveal a low-dimensional signature of operant learning in Aplysia. *Communications biology*, 5(1), 90.

Perez-Ortega J, et al. (2021) Long-term stability of cortical ensembles. *eLife*, 10.

MacDowell CJ, et al. (2020) Low-Dimensional Spatiotemporal Dynamics Underlie Cortex-wide Neural Activity. *Current biology : CB*, 30(14), 2665.

Unakafova VA, et al. (2019) Comparing Open-Source Toolboxes for Processing and Analysis of Spike and Local Field Potentials Data. *Frontiers in neuroinformatics*, 13, 57.