

Resource Summary Report

Generated by [NIF](#) on Sep 2, 2026

DeepSqueak

RRID:SCR_021524

Type: Tool

Proper Citation

DeepSqueak (RRID:SCR_021524)

Resource Information

URL: <https://github.com/DrCoffey/DeepSqueak>

Proper Citation: DeepSqueak (RRID:SCR_021524)

Description: Software MATLAB package for high throughput ultrasonic vocalizations detection, classification, and analysis.

Resource Type: software resource, software toolkit

Defining Citation: [DOI:10.1038/s41386-018-0303-6](https://doi.org/10.1038/s41386-018-0303-6)

Keywords: data quantification, ultrasonic vocalizations quantification, ultrasonic vocalization, OpenBehavior

Availability: Free, Available for download, Freely Available

Resource Name: DeepSqueak

Resource ID: SCR_021524

Alternate URLs: <https://edspace.american.edu/openbehavior/project/deepsqueak/>

License: BSD 3-Clause

Record Creation Time: 20220129T080356+0000

Record Last Update: 20260829T183129+0000

Ratings and Alerts

No rating or validation information has been found for DeepSqueak.

No alerts have been found for DeepSqueak.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 15 mentions in open access literature.

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

Tang W, et al. (2026) Auditory cortex modulates call duration in rats. Communications biology, 9(1).

Potasiewicz A, et al. (2025) Infant rat ultrasonic vocalizations in the neurodevelopmental model of schizophrenia. Scientific reports, 15(1), 27472.

Rebik AA, et al. (2025) Ultrasound Communications Reveal Social Aversion in Rats With Contact Motivation Deficits but not Anhedonia. Alpha psychiatry, 26(3), 43990.

Bombail V, et al. (2025) Stage 2 Registered Report: Refinement of tickling protocols to improve positive animal welfare in laboratory rats. F1000Research, 14, 773.

Popik P, et al. (2024) Deep learning algorithms reveal increased social activity in rats at the onset of the dark phase of the light/dark cycle. PloS one, 19(11), e0307794.

Olszyński KH, et al. (2024) Male rats emit aversive 44-kHz ultrasonic vocalizations during prolonged Pavlovian fear conditioning. eLife, 12.

Möhrle D, et al. (2023) Characterizing maternal isolation-induced ultrasonic vocalizations in a gene-environment interaction rat model for autism. Genes, brain, and behavior, e12841.

Gloveli N, et al. (2023) Play and tickling responses map to the lateral columns of the rat periaqueductal gray. Neuron, 111(19), 3041.

Murari K, et al. (2023) A clinically relevant selective ERK-pathway inhibitor reverses core deficits in a mouse model of autism. EBioMedicine, 91, 104565.

Ferreira H, et al. (2022) Sex-Dependent Social and Repetitive Behavior and Neurochemical Profile in Mouse Model of Autism Spectrum Disorder. Metabolites, 12(1).

Cox SS, et al. (2022) The role of the anterior insular during targeted helping behavior in male rats. Scientific reports, 12(1), 3315.

Qi C, et al. (2022) Excitatory and Inhibitory Synaptic Imbalance Caused by Brain-Derived Neurotrophic Factor Deficits During Development in a Valproic Acid Mouse Model of Autism. Frontiers in molecular neuroscience, 15, 860275.

Romero-Mujalli D, et al. (2021) Utilizing DeepSqueak for automatic detection and classification of mammalian vocalizations: a case study on primate vocalizations. Scientific reports, 11(1), 24463.

Binder MS, et al. (2021) Evaluating the DeepSqueak and Mouse Song Analyzer vocalization analysis systems in C57BL/6J, FVB.129, and FVB neonates. *Journal of neuroscience methods*, 364, 109356.

Hernandez-Lallement J, et al. (2020) Harm to Others Acts as a Negative Reinforcer in Rats. *Current biology : CB*, 30(6), 949.