

Resource Summary Report

Generated by SPARC SAWG on Sep 18, 2026

DeepSqueak

RRID:SCR_021524

Type: Tool

Proper Citation

DeepSqueak (RRID:SCR_021524)

Resource Information

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

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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: 20260912T200258+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 [SPARC SAWG](#) .

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.