

Resource Summary Report

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iELVis

RRID:SCR_016109

Type: Tool

Proper Citation

iELVis (RRID:SCR_016109)

Resource Information

URL: <http://ielvis.pbworks.com/w/page/116347253/FrontPage>

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Description: Software toolkit consisting of MATLAB and Bash scripts for intracranial electrode localization/visualization. It maps electrodes to various anatomical and functional atlases, and overlays electrode data over functional neuroimaging data. Software for intracranial electrode localization and visualization.

Synonyms: iELVis (intracranial electrode visualization), Intracranial ELeCtrode VISualization

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

Defining Citation: [PMID:28192130](#)

Keywords: electrode, stimulus, visualization, brain, neuroimaging, intracranial, localization, anatomy, functional, BRAIN Initiative

Funding: Swiss National Science Foundation PBGEP3_139829;
Swiss National Science Foundation P300P3_148388;
Natural Sciences and Engineering Research Council of Canada RGPIN-2014-04465;
Page and Otto Marx Jr. Foundation

Availability: Open source, Free, Available for download

Resource Name: iELVis

Resource ID: SCR_016109

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

License: GPL-3.0

Record Creation Time: 20220129T080328+0000

Record Last Update: 20250418T055439+0000

Ratings and Alerts

No rating or validation information has been found for iELVis.

No alerts have been found for iELVis.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 36 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Qiao X, et al. (2025) Exploring the neural mechanisms underlying cooperation and competition behavior: Insights from stereo-electroencephalography hyperscanning. iScience, 28(2), 111506.

Lyu D, et al. (2024) Causal Cortical and Thalamic Connections in the Human Brain. bioRxiv : the preprint server for biology.

Parvizi J, et al. (2024) Causal Cortical and Thalamic Connections in the Human Brain. Research square.

Zhu H, et al. (2024) Spectral-switching analysis reveals real-time neuronal network representations of concurrent spontaneous naturalistic behaviors in human brain. bioRxiv : the preprint server for biology.

Te Rietmolen N, et al. (2024) Speech and music recruit frequency-specific distributed and overlapping cortical networks. eLife, 13.

Cross ZR, et al. (2024) The development of aperiodic neural activity in the human brain. bioRxiv : the preprint server for biology.

Raghavan VS, et al. (2024) Improving auditory attention decoding by classifying intracranial responses to glimpsed and masked acoustic events. Imaging neuroscience (Cambridge,

Mass.), 2.

Bartoli E, et al. (2024) Default mode network electrophysiological dynamics and causal role in creative thinking. *Brain : a journal of neurology*, 147(10), 3409.

Chen YY, et al. (2023) Individual-specific memory reinstatement patterns within human face-selective cortex. *bioRxiv : the preprint server for biology*.

Nentwich M, et al. (2023) Semantic novelty modulates neural responses to visual change across the human brain. *Nature communications*, 14(1), 2910.

Geva-Sagiv M, et al. (2023) Augmenting hippocampal-prefrontal neuronal synchrony during sleep enhances memory consolidation in humans. *Nature neuroscience*, 26(6), 1100.

Raghavan VS, et al. (2023) Distinct neural encoding of glimpsed and masked speech in multitalker situations. *PLoS biology*, 21(6), e3002128.

Mischler G, et al. (2023) Deep neural networks effectively model neural adaptation to changing background noise and suggest nonlinear noise filtering methods in auditory cortex. *NeuroImage*, 266, 119819.

Melloni L, et al. (2023) An adversarial collaboration protocol for testing contrasting predictions of global neuronal workspace and integrated information theory. *PloS one*, 18(2), e0268577.

Ma J, et al. (2023) Pre-stimulus gamma power in human posteromedial cortex shows supra-modal mechanisms in predicting the amplitude and latency of task-induced suppression. *Cerebral cortex (New York, N.Y. : 1991)*.

Tan KM, et al. (2022) Electrocorticographic evidence of a common neurocognitive sequence for mentalizing about the self and others. *Nature communications*, 13(1), 1919.

Weisholtz DS, et al. (2022) Localized task-invariant emotional valence encoding revealed by intracranial recordings. *Social cognitive and affective neuroscience*, 17(6), 549.

Ramos-Escobar N, et al. (2022) Hippocampal and auditory contributions to speech segmentation. *Cortex; a journal devoted to the study of the nervous system and behavior*, 150, 1.

Aponik-Gremillion L, et al. (2022) Distinct population and single-neuron selectivity for executive and episodic processing in human dorsal posterior cingulate. *eLife*, 11.

Lavrov I, et al. (2021) Pre-motor versus motor cerebral cortex neuromodulation for chronic neuropathic pain. *Scientific reports*, 11(1), 12688.