Resource Summary Report

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SCRalyze

RRID:SCR_002542
Type: Tool

Proper Citation

SCRalyze (RRID:SCR_002542)

Resource Information

URL: http://scralyze.sourceforge.net

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Description: A powerful software for model-based analysis of peripheral psychophysiology (e.g. skin conductance, heart rate, pupil size etc.). General linear modelling and dynamic causal modelling of these signals provide for inference on neural states/processes. SCRalyze includes flexible data import and display, statistical inference and results display and export. Easy programming of add-ons for new data formats, signal channels, and models.

Abbreviations: SCRalyze

Synonyms: SCRalyze - A matlab environment for model-based psychophysiology

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

Keywords: eeg, meg, electrocorticography, matlab, modeling, os independent, quantification, time domain analysis

Funding:

Availability: GNU General Public License

Resource Name: SCRalyze

Resource ID: SCR_002542

Alternate IDs: nlx_155950

Alternate URLs: http://www.nitrc.org/projects/scralyze

Record Creation Time: 20220129T080214+0000

Record Last Update: 20250523T054247+0000

Ratings and Alerts

No rating or validation information has been found for SCRalyze.

No alerts have been found for SCRalyze.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 17 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Soshi T, et al. (2021) Modeling Skin Conductance Response Time Series during Consecutive Rapid Decision-Making under Concurrent Temporal Pressure and Information Ambiguity. Brain sciences, 11(9).

Koban L, et al. (2019) Different brain networks mediate the effects of social and conditioned expectations on pain. Nature communications, 10(1), 4096.

Bush KA, et al. (2018) Brain States That Encode Perceived Emotion Are Reproducible but Their Classification Accuracy Is Stimulus-Dependent. Frontiers in human neuroscience, 12, 262.

Gu X, et al. (2018) Heightened brain response to pain anticipation in high-functioning adults with autism spectrum disorder. The European journal of neuroscience, 47(6), 592.

Kirlic N, et al. (2017) Recruitment of orbitofrontal cortex during unpredictable threat among adults at risk for affective disorders. Brain and behavior, 7(8), e00757.

T Azevedo R, et al. (2017) The calming effect of a new wearable device during the anticipation of public speech. Scientific reports, 7(1), 2285.

Wheelock MD, et al. (2016) Prefrontal Cortex Activity Is Associated with Biobehavioral Components of the Stress Response. Frontiers in human neuroscience, 10, 583.

de Berker AO, et al. (2016) Computations of uncertainty mediate acute stress responses in humans. Nature communications, 7, 10996.

Bach DR, et al. (2015) A matching pursuit algorithm for inferring tonic sympathetic arousal from spontaneous skin conductance fluctuations. Psychophysiology, 52(8), 1106.

Gu X, et al. (2015) Autonomic and brain responses associated with empathy deficits in autism spectrum disorder. Human brain mapping, 36(9), 3323.

Staib M, et al. (2015) Optimising a model-based approach to inferring fear learning from skin conductance responses. Journal of neuroscience methods, 255, 131.

Alvarez RP, et al. (2015) Increased anterior insula activity in anxious individuals is linked to diminished perceived control. Translational psychiatry, 5(6), e591.

Bach DR, et al. (2014) A head-to-head comparison of SCRalyze and Ledalab, two model-based methods for skin conductance analysis. Biological psychology, 103, 63.

Bach DR, et al. (2013) An improved algorithm for model-based analysis of evoked skin conductance responses. Biological psychology, 94(3), 490.

Bach DR, et al. (2011) Dynamic causal modeling of spontaneous fluctuations in skin conductance. Psychophysiology, 48(2), 252.

Bach DR, et al. (2010) Modelling event-related skin conductance responses. International journal of psychophysiology : official journal of the International Organization of Psychophysiology, 75(3), 349.

Bach DR, et al. (2010) Analytic measures for quantification of arousal from spontaneous skin conductance fluctuations. International journal of psychophysiology : official journal of the International Organization of Psychophysiology, 76(1), 52.