Source Information Flow Toolbox
RRID:SCR_002561
Type: Tool

Proper Citation

Source Information Flow Toolbox (RRID:SCR_002561)

Resource Information

URL: http://sccn.ucsd.edu/wiki/SIFT

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Description: A GUI-enabled EEGLAB plugin for modeling and visualizing dynamical interactions between electrophysiological signals (EEG, ECoG, MEG, etc), preferably after transforming signals into the source domain. The toolbox consists of four modules: (1) Data Preprocessing, (2) Model Fitting and Connectivity Estimation, (3) Statistical Analysis, (4) Visualization, with a fifth Group Analysis module in development. Module 2 currently includes several adaptive multivariate autoregressive modeling (AMVAR) algorithms, including segmentation AMVAR and Kalman filtering. This subsequently allows the user to validate the model and estimate (in the time-frequency domain) a wide range of multivariate Granger-causal and coherence measures published to date. Module 3 includes routines for parametric and non-parametric significance testing. Module 4 contains routines for interactive visualization of dynamical interactions across time, frequency and anatomical source location.

Resource Type: Resource, segmentation software, image analysis software, data processing software, software application, data visualization software, software resource, software toolkit

Keywords: connectivity analysis, directed transfer analysis, eeg, meg, electrocorticography, granger causality, partial directed coherence

Parent Organization: Swartz Center for Computational Neuroscience

Related resources: EEGLAB
**Availability:** GNU General Public License

**Website Status:** Last checked up

**Abbreviations:** SIFT

**Resource Name:** Source Information Flow Toolbox

**Resource ID:** SCR_002561

**Alternate IDs:** nlx_155967

**Alternate URLs:** http://www.nitrc.org/projects/sift

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**Ratings and Alerts**


No alerts have been found for Source Information Flow Toolbox.

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**Data and Source Information**

**Source:** SciCrunch Registry

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**Usage and Citation Metrics**

We found 3 mentions in open access literature.

**Listed below are recent publications.** The full list is available at FDI Lab - SciCrunch Infrastructure.


Kaminski M, et al. (2014) Directed Transfer Function is not influenced by volume conduction-inefficient pre-processing should be avoided. Frontiers in computational neuroscience, 8, 61.