Resource Summary Report

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fNIRS Data Analysis Environment

RRID:SCR_009522
Type: Tool

Proper Citation

fNIRS Data Analysis Environment (RRID:SCR_009522)

Resource Information

URL: http://www.nitrc.org/projects/fnirs_downstate/

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Description: A data analysis environment for diffuse optical tomography (DOT) functional neuroimaging data. Developed to process data from steady-state time-series measurements, it allows for maximal flexibility in the number and positions of optodes. The central component is an application called NAVI. Features include: # An electronic ledger (records metadata for all data transformations). # Data conditioning (e.g., frequency-filtering, selection of data on the basis of signal-to-noise ratio.) # 2D or 3D image formation and display. # Interpretation: atlas-based mapping; automated anatomical labeling; GLM; data-driven methods (e.g., PCA, ICA); model-based (e.g., dynamic causal modeling) and data-driven (e.g., correlation) connectivity analysis. Another important component is the Brain Model Generator, which includes FEM meshes for all parts of the head accessible to DOT measurements. The user can input the numbers of optodes, and manually specify their locations or input tracking-system data.

Abbreviations: fNIRS Data Analysis Environment

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

Keywords: optical imaging, diffuse optical tomography, functional neuroimaging, optical tomography

Funding:

Resource Name: fNIRS Data Analysis Environment

Resource ID: SCR_009522

Alternate IDs: nlx_155683

Record Creation Time: 20220129T080253+0000

Record Last Update: 20250523T054737+0000

Ratings and Alerts

No rating or validation information has been found for fNIRS Data Analysis Environment.

No alerts have been found for fNIRS Data Analysis Environment.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.