Resource Summary Report

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Epsilon Radial Networks

RRID:SCR_009470
Type: Tool

Proper Citation

Epsilon Radial Networks (RRID:SCR_009470)

Resource Information

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

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Description: An efficient framework for building and analyzing graphs called epsilon radial networks (ERNs) using tractography data in a normalized space. Currently there is no agreed-upon method for constructing the brain anatomical connectivity graphs out of large number of white matter tracts. The key challenge in defining brain networks is node delineation and their method defines nodes in the graph using tract-end points clustered in a sphere of a given radius (epsilon). Using a kd-tree based search algorithm they can identify the nodes computationally efficiently and in a fully automatic way. These networks can be used not only to analyze topo-physical properties of the structural brain networks but also to perform classical region-of-interest (ROI) analyses in a very efficient way. Thus ERNs can be used as a novel image processing lens for statistical and machine learning based analyses.

Abbreviations: ERNs

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

Keywords: magnetic resonance, connectivity, white matter tract

Availability: DTI-TK license, Http://www.nitrc.org/include/glossary.php#540

Resource Name: Epsilon Radial Networks

Resource ID: SCR_009470

Alternate IDs: nlx_155617

Record Creation Time: 20220129T080253+0000

Record Last Update: 20260808T185924+0000

Ratings and Alerts

No rating or validation information has been found for Epsilon Radial Networks.

No alerts have been found for Epsilon Radial Networks.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.