DONE: Detection of Outlier NEurons

RRID:SCR_005299
Type: Tool

Proper Citation

DONE: Detection of Outlier NEurons (RRID:SCR_005299)

Resource Information

URL: http://www.biological-networks.org/p/outliers/

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Description: Software that performs a morphology-based approach for the automatic identification of outlier neurons based on neuronal tree structures. This tool was used by Zawadzki et al. (2012), who reported on and its application to the NeuroMorpho database. For the analysis, each neuron is represented by a feature vector composed of 20 measurements, which are projected into lower dimensional space with PCA. Bivariate kernel density estimation is then used to obtain a probability distribution for cells. Cells with high probabilities are understood as archetypes, while those with the small probabilities are classified as outliers. Further details about the method and its application in other domains can be found in Costa et al. (2009) and Echtermeyer et al. (2011). This version requires Matlab (Mathworks Inc, Natick, USA) and allows the user to apply the workflow using a graphical user interface.

Abbreviations: DONE

Synonyms: Detection of Outlier NEurons

Resource Type: software resource, software application

Defining Citation: PMID:22615032

Keywords: neuron, feature-space, archetype, outlier, matlab, neuromorphometry, computational neuroscience

Funding Agency: FAPESP, CNPq, CNPq, FAPESP sponsorship, FAPESP sponsorship, EPSRC, EPSRC, National Research Foundation of Korea
Availability: GNU General Public License

Resource Name: DONE: Detection of Outlier NEurons

Resource ID: SCR_005299

Alternate IDs: nlx_144348

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

Ratings and Alerts

No rating or validation information has been found for DONE: Detection of Outlier NEurons.

No alerts have been found for DONE: Detection of Outlier NEurons.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.