# **Resource Summary Report**

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# **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: FAPESP 05/00587-5;

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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

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### 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.