ROBEX (RRID:SCR_002534) is a tool for automatic whole-brain extraction of T1-weighted MRI data. The robustness of whole-brain segmentation is critical for the overall performance of neuroimaging pipelines. Many methods have been proposed, but they often work well on certain datasets and fail on others, or require case-specific parameter tuning. ROBEX aims to provide robust skull-stripping across datasets with no parameter settings. It fits a triangular mesh, constrained by a shape model, to the probabilistic output of a supervised brain boundary classifier. A small free deformation is allowed to accommodate unseen cases. The deformation is optimized using graph cuts.

**Resource Name:** ROBEX

**Proper Citation:** ROBEX (RRID:SCR_002534)

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

**Keywords:** magnetic resonance, mri, skull stripping, classification, segmentation, brain, skull

**Resource ID:** SCR_002534

**References:** PMID:21880566

**Availability:** GNU Lesser General Public License, GNU General Public License, BSD License

**Website Status:** Last checked up
Alternate IDs: nlx_155939

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

Abbreviations: ROBEX

Ratings and Alerts

- 4.5 / 5 (2 votes) Rated at NITRC http://www.nitrc.org/projects/robex

No alerts have been found for ROBEX.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.