gumpdata Documentation

Release

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Contents

This repository contains code and data file associated with the "Forrest Gump" functional magnetic resonance imaging (fMRI) data release. This includes the scripts used to convert all data from its raw formats into the respective released form. Data conversion also covers de-identification.

A minimal Python module for data access is provided that serves as a reference implementation and executable documentation for data organization. Moreover, the module comes with a set of unit tests that verify certain aspects of data integrity and known anomalies.

More information on the dataset can be found in Hanke et al. (201x)

Bug tracker | Documentation | Downloads

Repository content

data/deface/ Templates and mask images for the de-facing procedure

doc/ API documentation source files

gumpdata/ Python data access module

scripts/conversion/ Scripts used to convert data from its raw into the released form

scripts/figures/ Scripts to produce figures in the data paper

scripts/openfmri/ Configuration file for the openfmri_helpers package for producing the group template images

scripts/similarity_analysis/ Scripts to perform the univariate and multivariate pattern similarity analysis in the data paper

Dataset tests

The `gumpdata` Python module comes with a number of tests to verify data integrity and consistency. These tests can be executed using Python `nose` package or a similar test framework.

Enter the root directory containing the data release files and run `nosetests`, while setting the PYTHONPATH environment variable to point to the directory with the content of this repository:

```
$ PYTHONPATH=<path-to-repo-checkout>:$PYTHONPATH nosetests
```

This will execute all available tests. The source of the tests is also executable documentation for the data access API.

License

All code is licensed under the terms of the MIT license, or some equally liberal alternative license. Please see the COPYING file in the source distribution for more detailed information.

Wanna help?

If you think it would be worthwhile to contribute to this project your input would be highly appreciated. Please report issues, send feature-requests, and pull-request without hesitation!

Data access API documentation

`GumpData`

Indices and tables

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