Computational Reproducibility Cookbook

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1 Intro

1.1 Background on reproducibility

2 Five levels of computational reproducibility

3 Implementation

3.1 Flags for level of analysis

3.2 Markdown file structure

one big chunk, all at start, interleaved throughout

3.3 Automating figure generation

3.4 Data downloading

3.5 Package management

renv and automatic activation

3.6 Python chunks

3.7 Command line and matlab functions

3.8 Output formats

3.9 Github syncing

4 An example:

Uploading data Downloading data Analysis and embedding code in text Autogenerating figures Github syncing Renv

5 Modality-specific issues

MRI, manual analyses