Neuroconductor: An R Platform for Medical Imaging Analysis

John Muschelli

Johns Hopkins University E-mail: muschellij2@gmail.com

Abstract: Neuroconductor (https://neuroconductor.org) is an open-source platform for rapid testing and dissemination of reproducible computational imaging software. The goals of the project are to: 1) provide a centralized repository of R software dedicated to image analysis, 2) disseminate software updates quickly, 3) train a large, diverse community of scientists using detailed tutorials and short courses, 4) increase software quality via automatic and manual quality controls, and 5) promote reproducibility of image data analysis.

We provide a description of the purpose of Neuroconductor, highlight some packages, and show some imaging analysis examples.