Setup Instructions for Resting State GUI

2026-10-06

Requirements:

1. **MATLAB 2025a or later**
    a. Developed and tested on 2026a
    b. Other recent versions may work but have not been tested
2. **Official MATLAB Toolboxes**:
    a. Parallel Computing Toolbox
    b. Signal Processing Toolbox
    c. Statistics and Machine Learning Toolbox
    d. Wavelet Toolbox
    e. *These can either be selected during MATLAB's installation or added later through MATLAB's "Add-On Explorer" (click "Add-Ons" in the ribbon menu)*

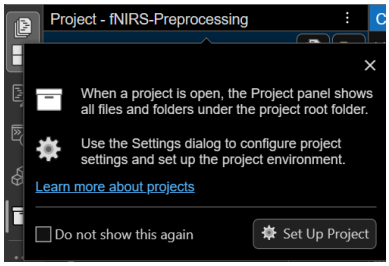
Download and Setup:

1. Download *GUIRestingState_DownloadAndSetup.m* and run it in MATLAB
    a. Does not need to be added to MATLAB's path and can be deleted afterwards
2. The script will do the following:
    a. Warn if an unsupported version of MATLAB is in use
    b. Stop if any of the required official MATLAB toolboxes are missing
    c. Download and install fNIRS-Preprocessing and NIRS Toolbox
        i. You will be prompted to enter a folder path to install to
        ii. This step will run for a few minutes
    d. Download the GUI and add it to MATLAB's path
        i. You will be prompted to enter a folder path to install to
3. Launch the GUI by calling *GUIRestingState*

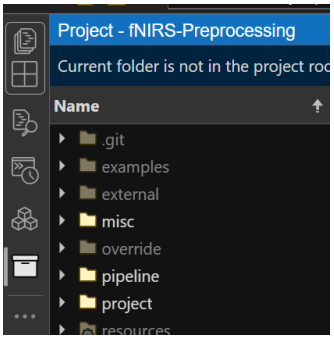
MATLAB "Project":

fNIRS-Preprocessing is a MATLAB "Project", which means that it can be opened/closed instead of always being on the path. This helps to prevent conflicts with other toolboxes and also automates startup/shutdown functions.

1. The first ever time that the project is opened, you will be prompted to give it permission to run
2. You can check "Do not show this again" and close out this pop-up



3. Opening a project changes the left panel view from Files/Workspace to Project. To restore the default view, click the top button along the left side.



Updates:

During startup, both the GUI and fNIRS-Preprocessing will check GitHub for changes. If updates are available, then a message will be displayed in the Command Window listing those changes as well as instructions for how to apply the update (function call).

To manually update the GUI, run the following line in the command window
GUIRestingState.PullUpdates

Support:

Contact consulting@synapseneuroanalytics.com and/or Kevin Stubbs (kmstubbs@gmail.com) if you encounter any issues.