Real time fMRI Motion Viewer

Instructions to run the Demo code from OHBM

All codes you need to run the Demo are inside the folder "Demo_codes".
Demo_codes
|-> afni_send_motion.sh
|-> data
|-> Receive
|-> same_folder_afni
|-> Send

Step 1 – Copy the files inside the folder "same_folder_afni" (i.e. lib_image_control.py and realtime_receiver.py) to your AFNI folder (in which AFNI is installed in your computer)

Step 2 – Open three terminal tabs

Step 3 – On the first terminal tab, go to the "Receive" folder. Run the script "receive_data.sh". AFNI program and the motion viewer lib will open. Now, you need to set the parameters ("Head motion limit" and "Acceptable Head Motions"), and press "Start".

Step 4 – On the second terminal tab, go to the "Send" folder. Run the script "sendFMRI.sh". Once you ran the script, you need to answer some questions. For this demo, follow the next steps:
- Press "Enter" ("Press Enter only ig you have executed the localizer exam from this patient.")
- Write "yes"
- TR = 2.0
- Volumes = 200
- Number of slices = 29
- Press "Enter"
Now, the send script is ready to send the dicom images.

Step 5 – On the third terminal tab, run the script "afni_send_motion.sh". You need to pass as argument the folder name of the dicom images. You can find the dicom images in the "data" folder.
- If you want to run a data without excessive movement:
  ./afni_send_motion.sh without_movement
- If you want to run a data with excessive movement:
  ./afni_send_motion.sh with_movement

Step 6 – Data will the transfer and you can see the head movement in real time.

Step 7 – Before a new run, don't forget to delete the dicom folder (with_movement folder and/or without_movement folder) in the "Send/images/EPI_run".

Step 8 – Run these steps every time you need to analyze the movement in a new set of dicom images.

Please, let me know if you have problems running this demo.