Instruction on running SPRT and Preprocessing.

- 1. Log in to the Linux server under Sarah's account. Create two sessions, one for SPRT and one for Preprocessing. Username: sjc95
- 2. Change directory to the experiment folder.
- 3. After Sarah creates the alignment file and ROI mask for 1-back protol. Type in the following command in each session.

SPRT: (Black is the command to type in and red is explanation)

make Compile the source code and generate executable /SPRT\_P 238 8 238 indicates full-length 1-back protocol. 8 is the

column size of the design matrix

SPRT will ask for a few more parameters:

K\_block: usually 78, but ask Dr. Tatsuoka first.

 $\theta_0$ : 0 selector: 2

C1: 010000000 C2: 001000000

alpha & beta: usually 0.01 0.7, but ask Dr. Tatsuoka to confirm.

Z score: ask Dr. Tatsuoka to confirm (usually range from 2.5 to 3.5)

percentage: usually 60 60, ask Dr. Tatsuoka to confirm.

## Preprocessing:

python2 preprocessing.py 238 0 [parrec file directory] [parrect filename prefix format] [nifti file directory] [alignment file path] [bold text file directory] [ROI file path]

## An example:

python2 preprocessing.py 238 0 ./parrec/0001/ Dump-000 ./nifti/ ./fmri\_brain.nii.gz ./Latest\_data/ROIs/hard\_target\_fmri\_bin.nii.gz