

## Manual for PyMVPA wrapper similarity analysis

fmriDsm.py

```
[ [ dataset <filename> mask <filename> samples <filename> ]  
  [ select <list> ]  
  [ detrend ]  
  [ zscore ]  
  [ average ]] ||  
[ datamat <filename>] ]  
[ dsm correlation <name> dsmsave <filename> dsmdisplay ]  
[ searchlight <radius> dsmmeasure <name> ]  
[ save <filename> ]
```

#####

dataset <filename> - parameter

- option to specify the dataset file (string)
- <filename> is the filename with .nii.gz extension

#####

samples <filename> - parameter

- option to specify the attributes file (string)
- <filename> is the filename with .txt extension

#####

mask <filename> - parameter

- option to specify the mask file (string)
- <filename> is the filename with .nii.gz extension

#####

select <list> - label list

detrend - specify to detrend the dataset

zscore - specify to zscore the dataset

average - average across all labels

datamat <filename> - MATLAB filename

searchlight <radius> dsmmeasure <name> - searchlight measure with dsm and radius

save <filename> - to save the searchlight result

Example:

```
python fmriDsm.py dataset ../../data/sub1/wrbold1A.nii.gz mask ../../data/sub1/mask.img  
samples ../dsm/attrbDsmSetA.txt detrend zscore select [1.0,2.0,3.0,4.0,5.0,6.0,7.0,8.0]  
dsm correlation spearman dsmsave temp2.dat dsmdisplay average
```

```
python fmriDsm.py datamat ../rsa/hippo/avgsub1.mat dsm correlation spearman  
dsmsave temp.dat dsmdisplay
```

#####

Average across all subjects

To execute this command, copy all the subject's dat files from previous command into a directory and run the following command:

```
fmriDsmAll.py shape <value> matfile <filename> save <filename>
```

shape <value> - mandatory parameter to reshape the dat files

matfile <filename> - to save result in matfile

save <filename> - save in dat file

Example:

```
python fmriDsmAll.py shape 8 [save tmp.dat matfile tmp.mat]
```