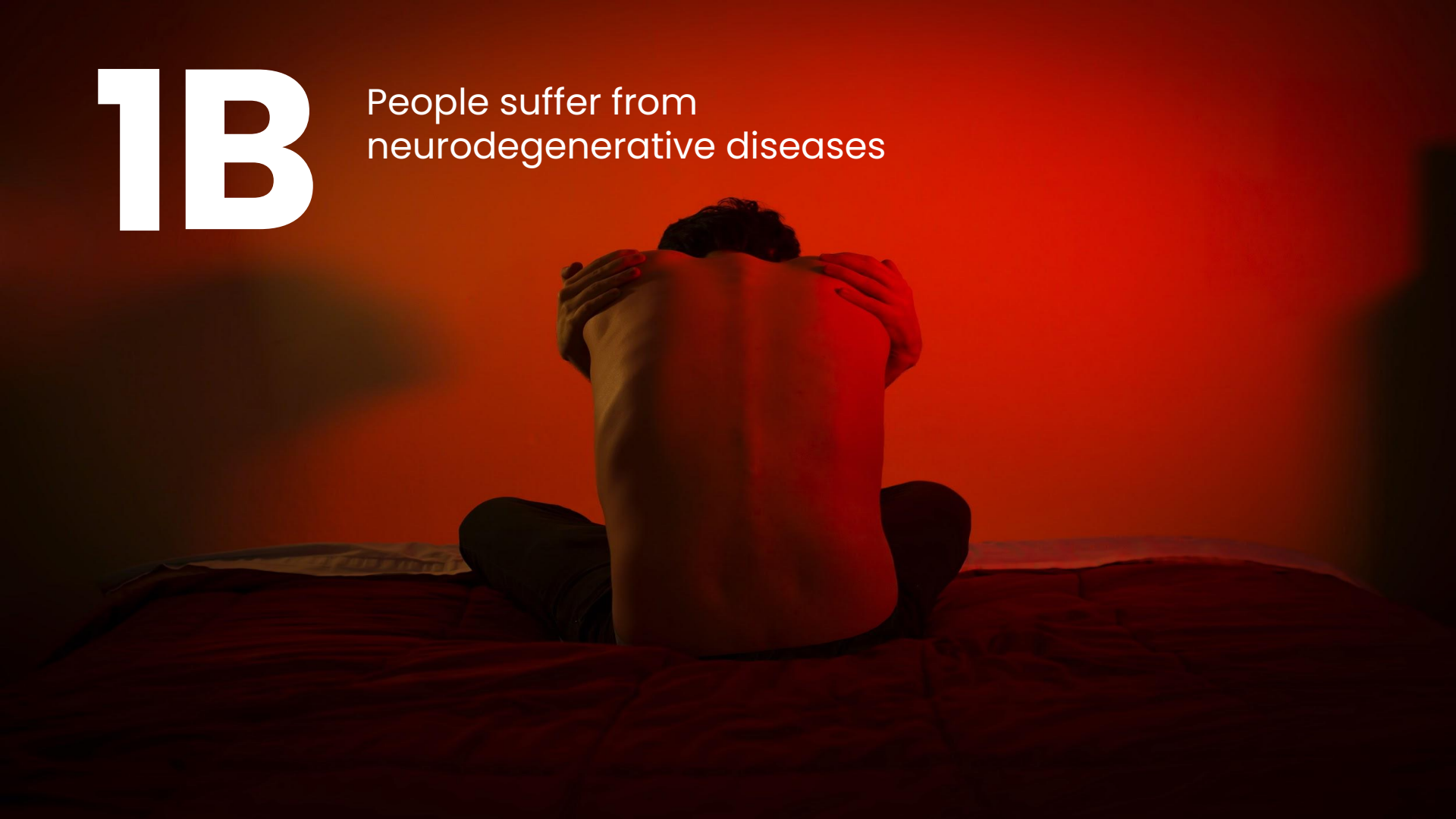
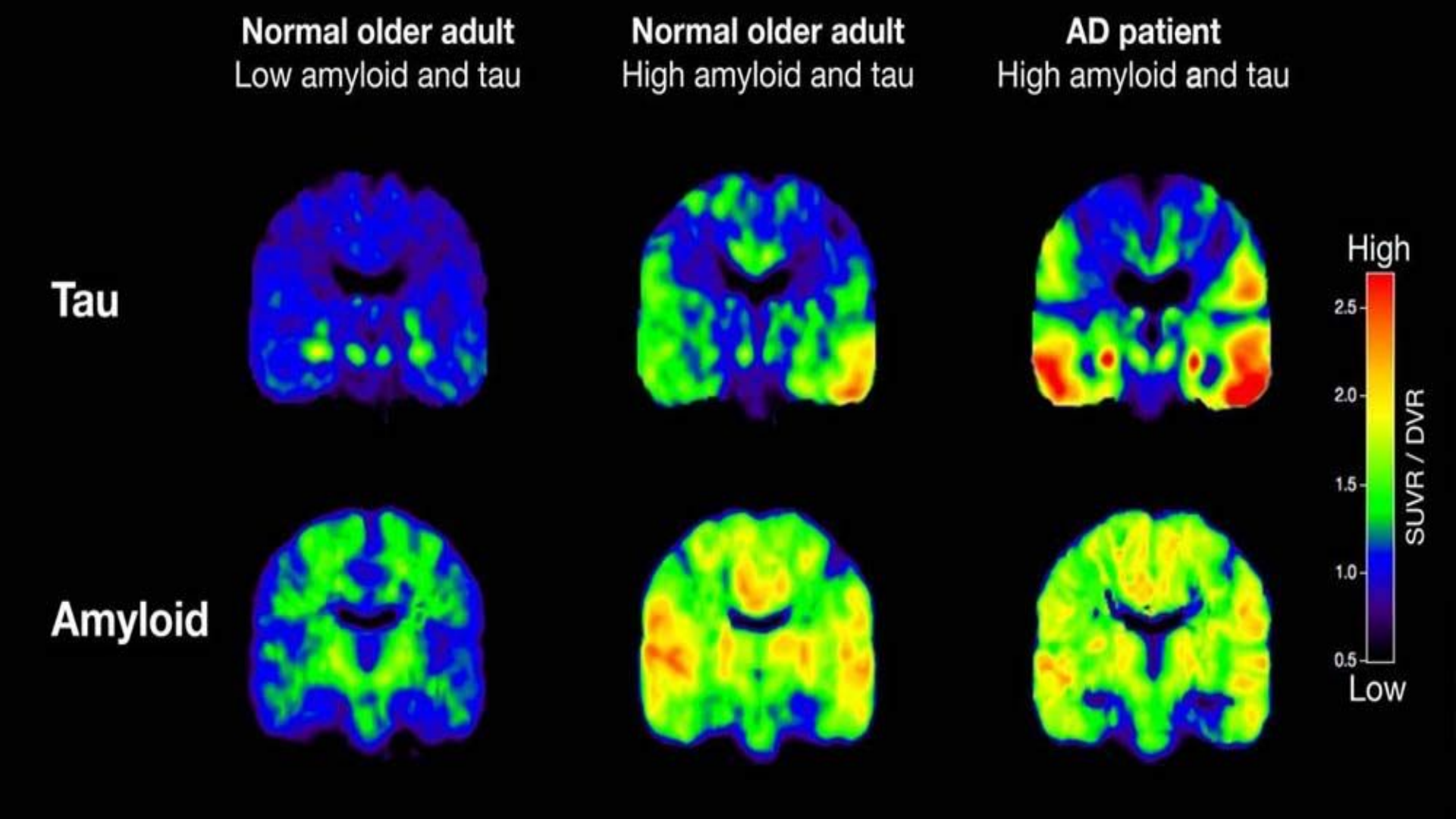
5.8 million

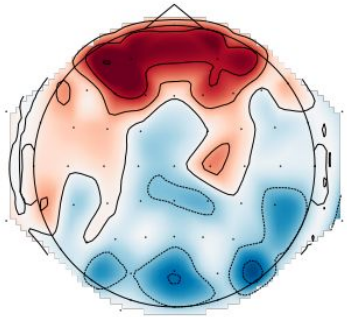

1B
People suffer from
neurodegenerative diseases

biochemistry

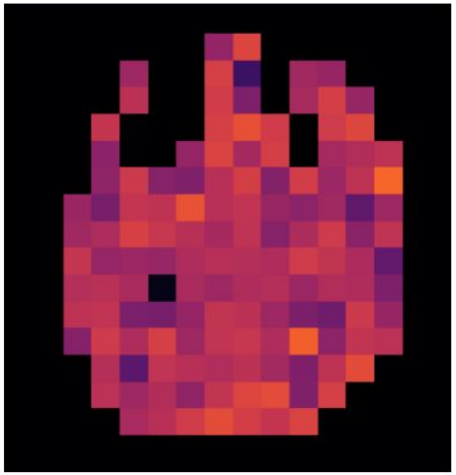
fMRI


Normal older adult
Low amyloid and tau
Normal older adult
High amyloid and tau
AD patient
High amyloid and tau
Tau
Amyloid
High
2.5
2.0
1.5
1.0
0.5
Low
SUVR / DVR

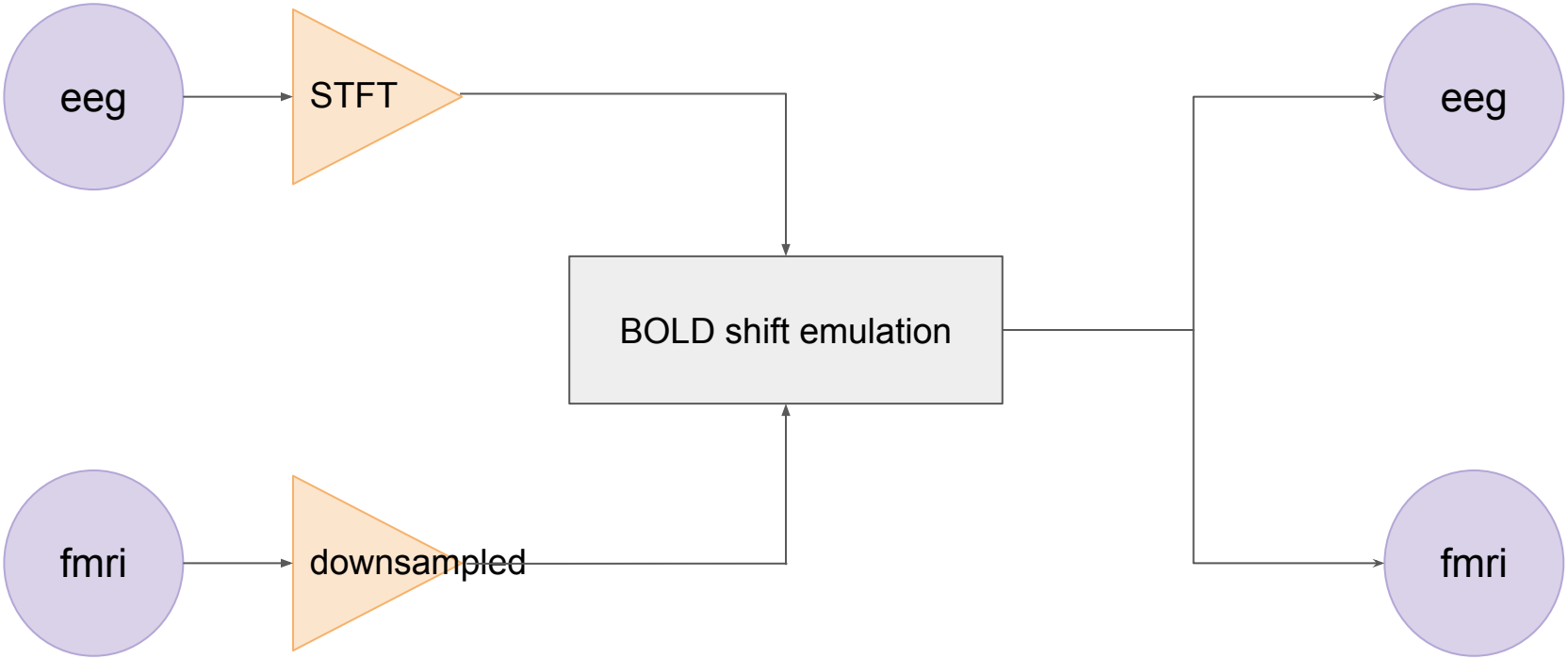
fMRI accuracy → EEG

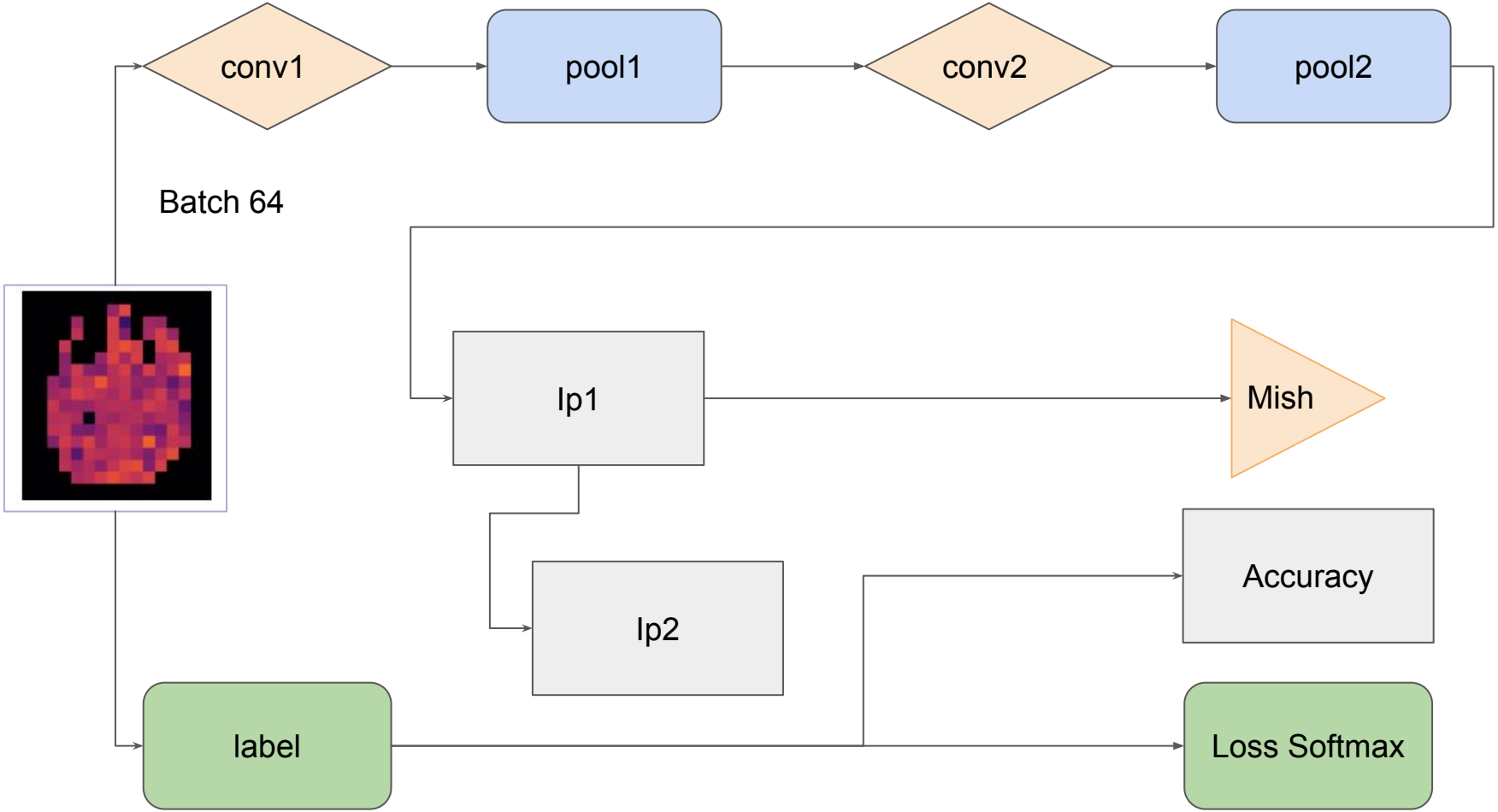


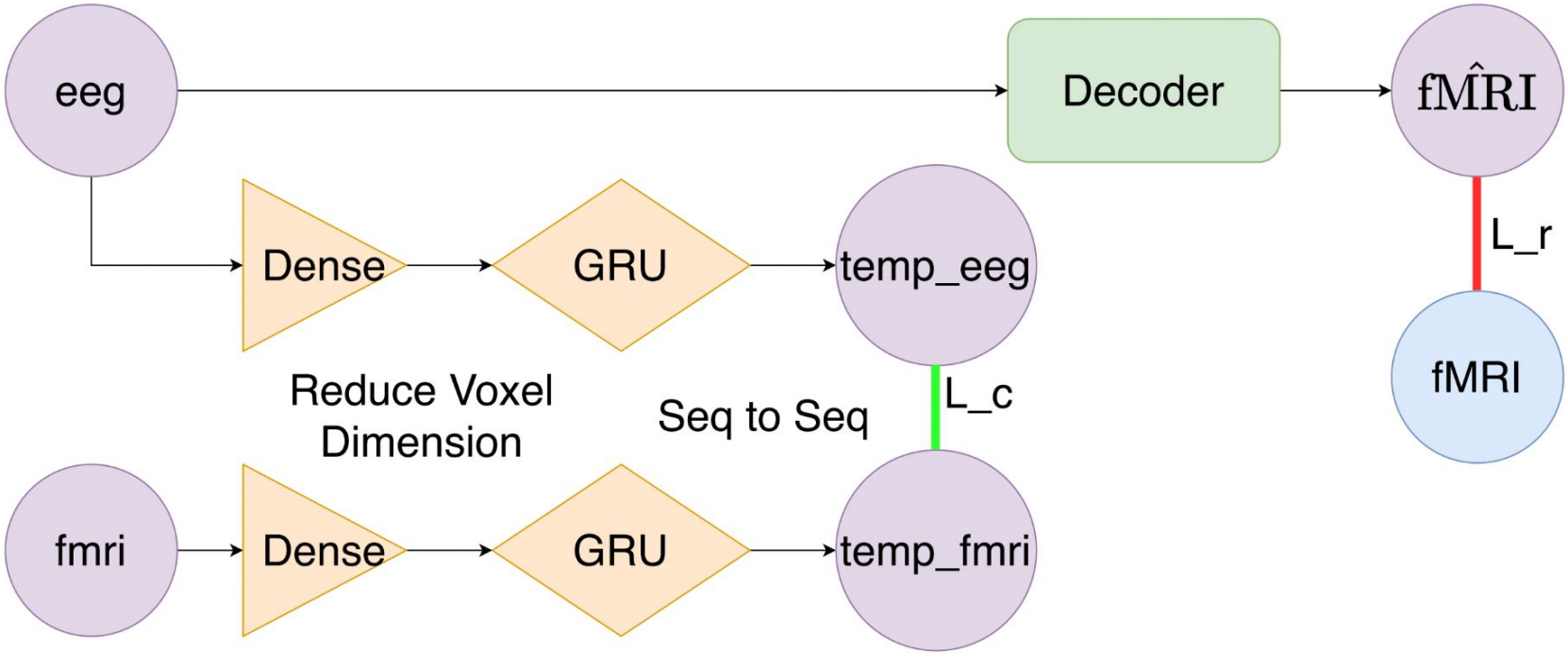
(a) EEG source localization topography map



(b) fMRI sliced at z axis


eeg
STFT
BOLD shift emulation
eeg
fmri
downsampled
fmri


conv1
pool1
conv2
pool2
Batch 64
ip1
Mish
ip2
Accuracy
label
Loss Softmax


eeg
Decoder
$\hat{fMRI}$
Dense
GRU
temp_eeg
L_r
fMRI
Reduce Voxel Dimension
Seq to Seq
L_c
fmri
Dense
GRU
temp_fmri