Total balanced files from wav dataset, and corresponding tfrecords

total\_balanced\_CHN, and balanced\_tfrecords\_23/train.tfrecord

LDA classifier results on total balanced segments from one annotator:

python LDA\_test\_reliability.py --TF\_RECORDS\_DIR='balanced\_tfrecords\_23/train.tfrecord' --CHN\_DATASET\_DIR='total\_balanced\_CHN/' --NUM\_FEATURES=23

LDA classifier results on balanced reliability dataset:

LDA\_test\_reliability.py --NUM\_FEATURES=23 --TF\_RECORDS\_DIR='reliability\_CHN\_segments\_tfrecords/train\_23.tfrecord' --CHN\_DATASET\_DIR='reliability\_CHN\_segments/'

Make FBANK features:

python make\_tfrecords\_FBANK.py \

--CHN\_segment\_dir='/Users/yijiaxu/Desktop/prosody\_AED/total\_balanced\_CHN/' \

--tfrecord\_file\_dir='fbank\_tfrecords\_5labels/' --train=True

(fbank\_tfrecords\_5labels: now we get 5 set of train-test pair for performing CV evaluations, on 5 labels)

(fbank\_tfrecords\_4labels: ignored HIC by minor modifications on code)

(50x64)

~~(fban\_features\_4labels\_smaller): smaller FBANK features (20x64)~~

Train with FBANK features:

python train\_prosody.py \

--filenames= fbank\_tfrecords\_5labels/train0.tfrecord \

--batch\_size=30 --num\_epochs=1200 \

--logDir='ckpt\_fbank/' --restore=False --num\_classes=5

--prosody\_or\_fbank=’fbank’

Evaluate the features:

python eval.py --filenames=fbank\_tfrecords\_5labels/test0.tfrecord --batch\_size=1 --num\_epochs=1 --ckptdir='ckpt\_fbank/ 4labels0' --restore=True --num\_classes=5 --prosody\_or\_fbank='fbank'

(gives accuracy and F-score)

Make 5-fold cv 23 prosody features for NN classifier:

Make\_tfrecord.py -> prosody\_tfrecords\_4labels

RESULTS:

TRAIN CNN: python train\_prosody.py --filenames=fbank\_tfrecords\_4labels\_smaller/train0.tfrecord --batch\_size=16 --num\_epochs=256 --logDir='ckpt\_fbank/' --restore=False --num\_classes=4 --prosody\_or\_fbank='fbank'

TEST CNN(K-FOLD): python eval.py --filenames=fbank\_tfrecords\_4labels\_smaller/test0.tfrecord --batch\_size=1 --num\_epochs=1 --ckptdir='ckpt\_fbank/' --restore=True --num\_classes=4 --prosody\_or\_fbank='fbank'

Use the CNN model trained to HMM:

First get all (all segments in all file sequences) the observation probabilities by using 5-fold different CNN models (in: fbank\_tfrecords\_total\_4labels/test.tfrecord)

python make\_tfrecords\_FBANK.py --CHN\_segment\_dir='/Users/yijiaxu/Desktop/prosody\_AED/CHN\_segments/' --tfrecord\_file\_dir='fbank\_tfrecords\_total\_4labels/' --train=False

Run eval on it. -> prob\_hmm.csv

NOTE: run on all segments (CHN\_TOTAL) not the balanced one

python eval.py --filenames=fbank\_tfrecords\_total\_4labels/test.tfrecord --batch\_size=1 --num\_epochs=1 --ckptdir='ckpt\_fbank/' --restore=True --num\_classes=4 --prosody\_or\_fbank='fbank'

python caveneuwirth.py --TestTextgrid='e20170801\_122506\_011543\_GRP.TextGrid' --Train\_Directory='/Users/yijiaxu/Desktop/prosody\_AED/HMM\_CODE/test\_CHN\_Textgrid/' --A\_rand\_init=False --CsvDirectory='/Users/yijiaxu/Desktop/prosody\_AED/HMM\_CODE/multi\_prob\_stats/' --lamb=0 --B\_norm=False --getBmatrix=multi --train=False --Test\_Directory='/Users/yijiaxu/Desktop/prosody\_AED/HMM\_CODE/test\_CHN\_Textgrid/'

# python /Users/yijiaxu/Library/Python/2.7/bin/tensorboard --logdir=ckpt/

# <http://localhost:6006/#scalars>