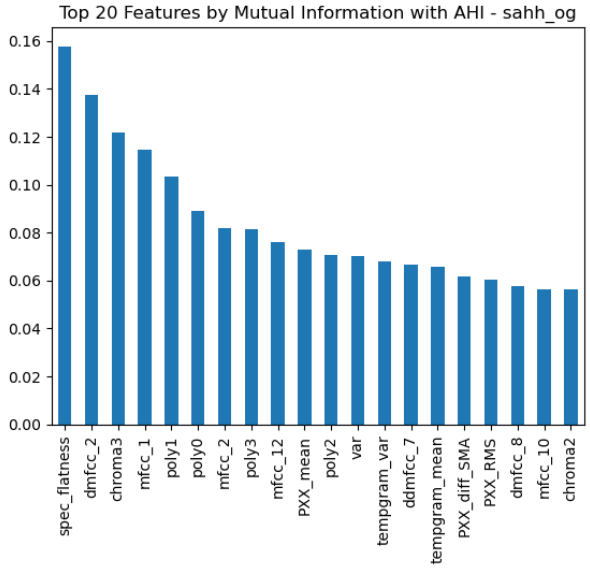
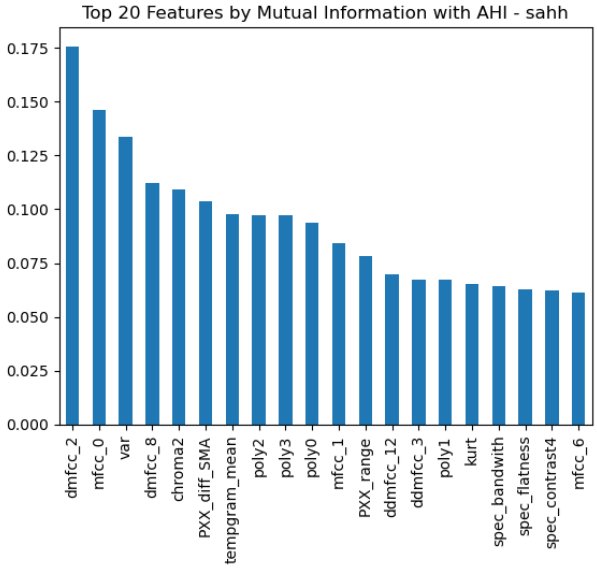
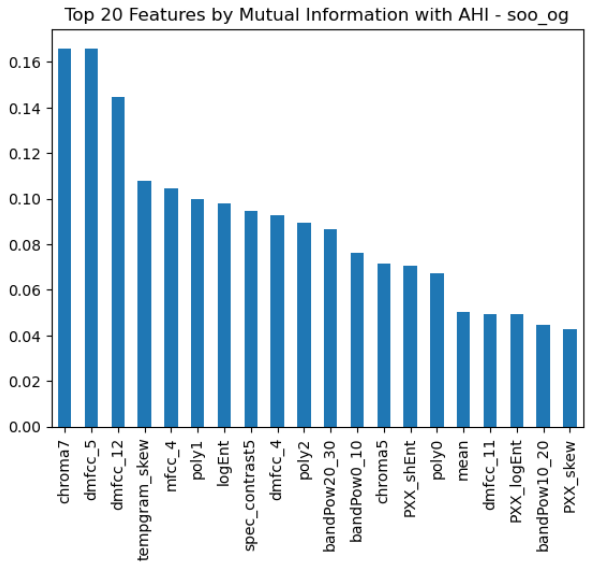
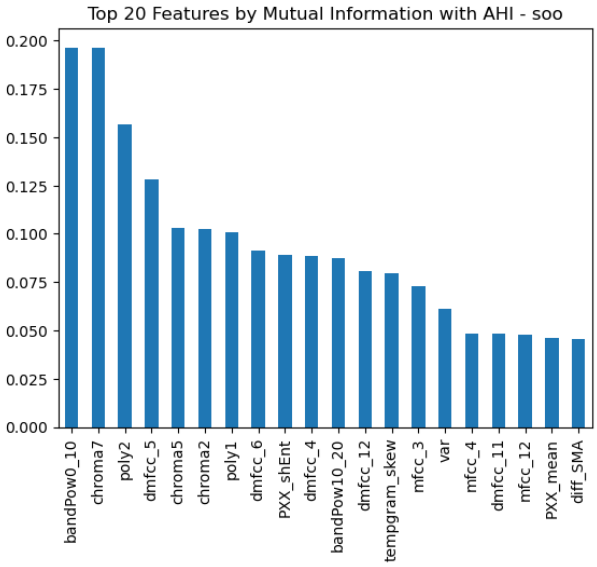
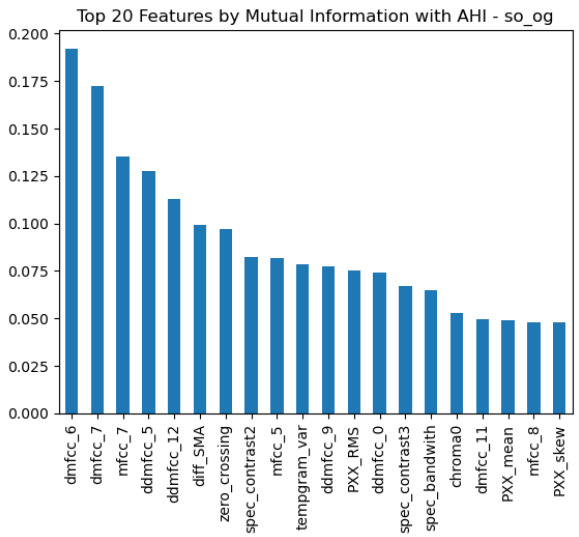
- Mean MI
- Max MI
- Sum MI
- Feature aggregation

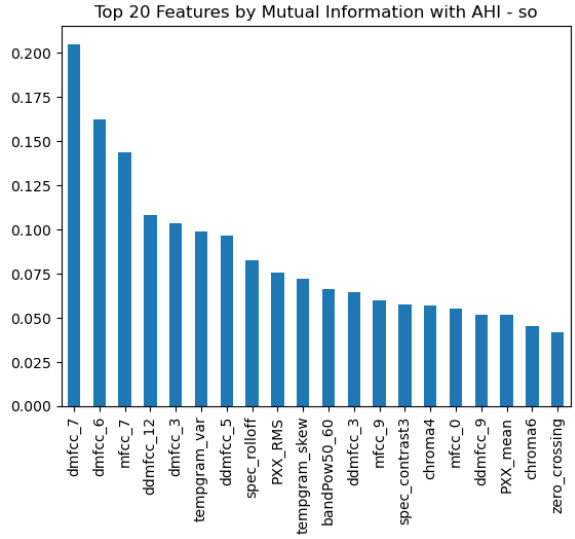


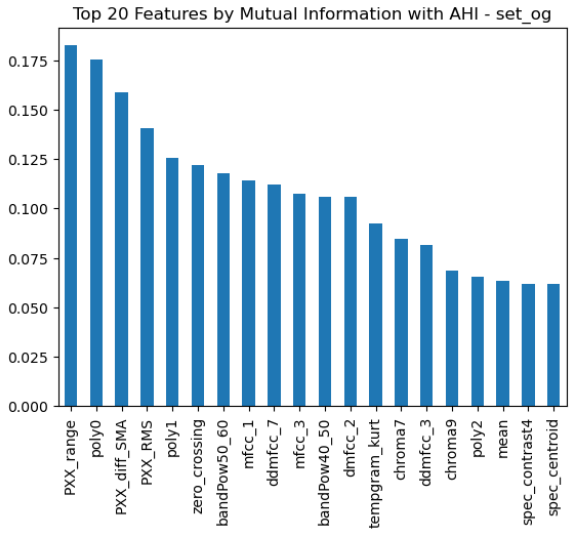


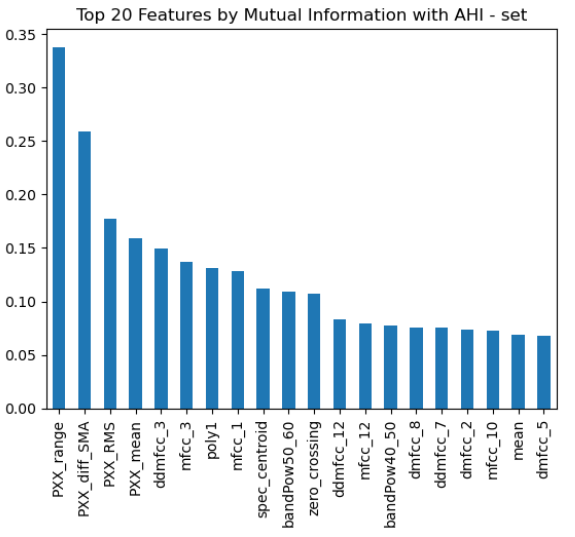


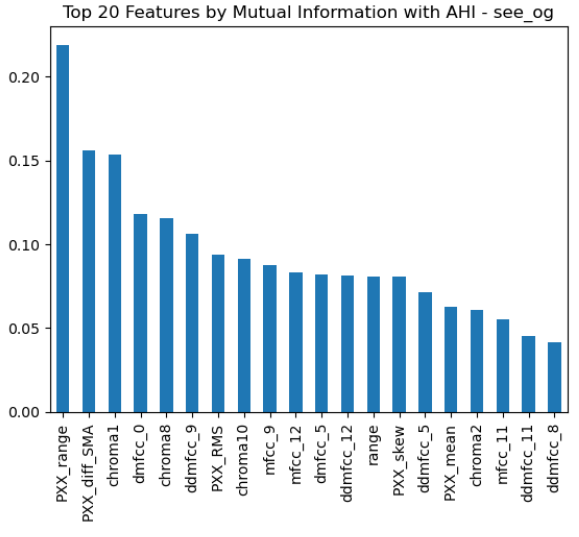


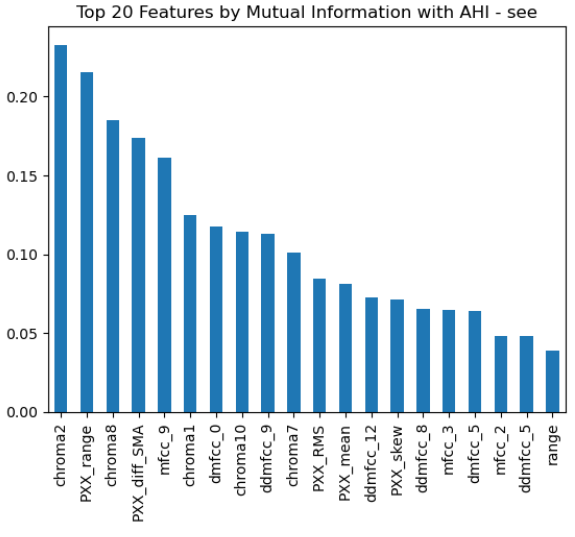

Top 20 Features by Mutual Information with AHI - so_og
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
dmfcc_6
dmfcc_7
mfcc_7
ddmfcc_5
ddmfcc_12
diff_SMA
zero_crossing
spec_contrast2
mfcc_5
tempgram_var
ddmfcc_9
PXX_RMS
ddmfcc_0
spec_contrast3
spec_bandwith
chroma0
dmfcc_11
PXX_mean
mfcc_8
PXX_skew

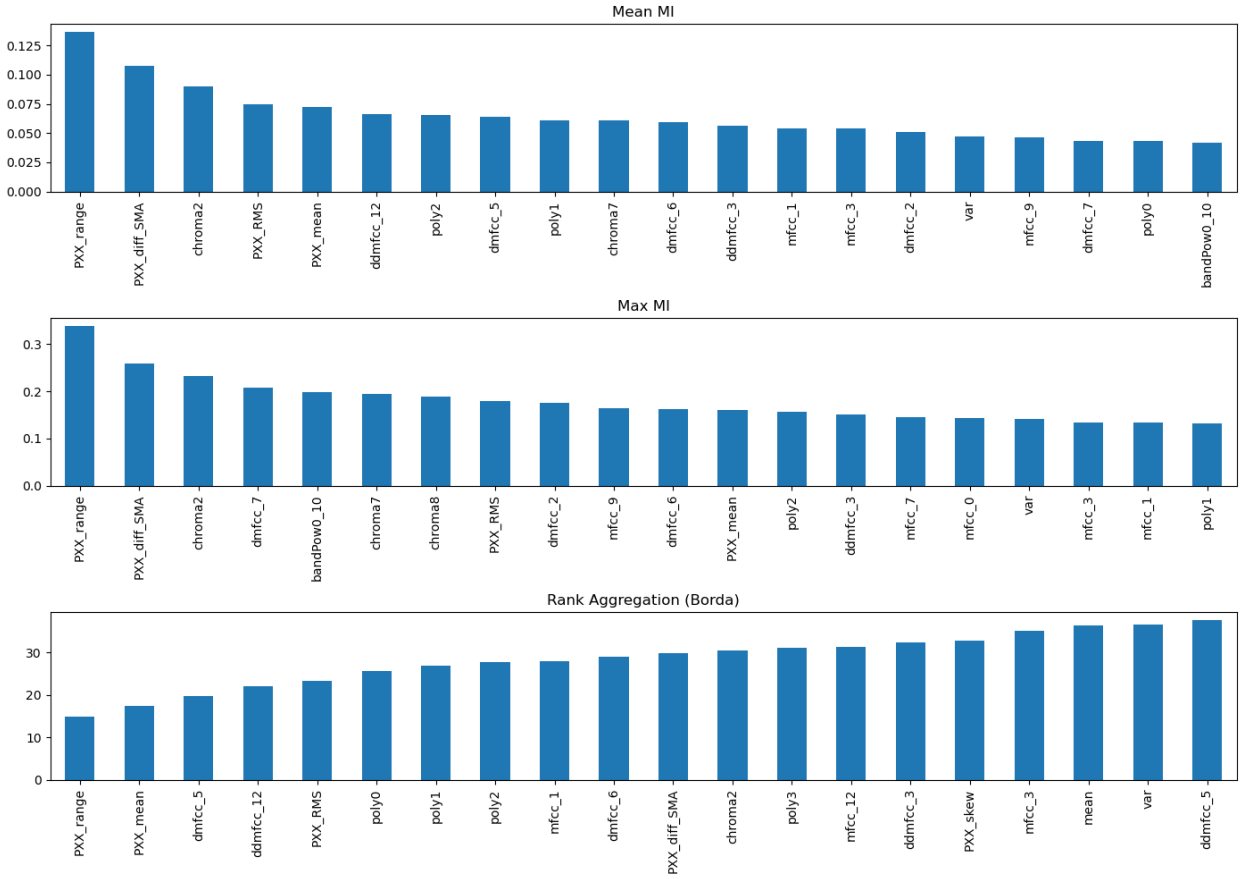

Top 20 Features by Mutual Information with AHI - so
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
dmfcc_7
dmfcc_6
mfcc_7
ddmfcc_12
dmfcc_3
tempgram_var
ddmfcc_5
spec_rolloff
PXX_RMS
tempgram_skew
bandPow50_60
ddmfcc_3
mfcc_9
spec_contrast3
chroma4
mfcc_0
ddmfcc_9
PXX_mean
chroma6
zero_crossing

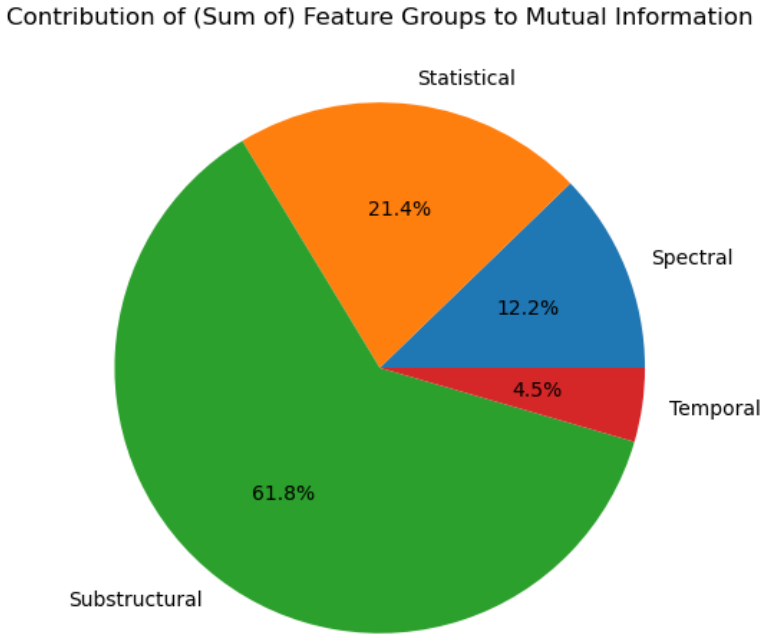

Top 20 Features by Mutual Information with AHI - set_og
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
PXX_range
poly0
PXX_diff_SMA
PXX_RMS
poly1
zero_crossing
bandPow50_60
mfcc_1
ddmfcc_7
mfcc_3
bandPow40_50
dmfcc_2
tempgram_kurt
chroma7
ddmfcc_3
chroma9
poly2
mean
spec_contrast4
spec_centroid


Top 20 Features by Mutual Information with AHI - set
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
PXX_range
PXX_diff_SMA
PXX_RMS
PXX_mean
ddmfcc_3
mfcc_3
poly1
mfcc_1
spec_centroid
bandPow50_60
zero_crossing
ddmfcc_12
mfcc_12
bandPow40_50
dmfcc_8
ddmfcc_7
dmfcc_2
mfcc_10
mean
dmfcc_5


Top 20 Features by Mutual Information with AHI - see_og
0.20
0.15
0.10
0.05
0.00
PXX_range
PXX_diff_SMA
chroma1
dmfcc_0
chroma8
ddmfcc_9
PXX_RMS
chroma10
mfcc_9
mfcc_12
dmfcc_5
ddmfcc_12
range
PXX_skew
ddmfcc_5
PXX_mean
chroma2
mfcc_11
ddmfcc_11
ddmfcc_8

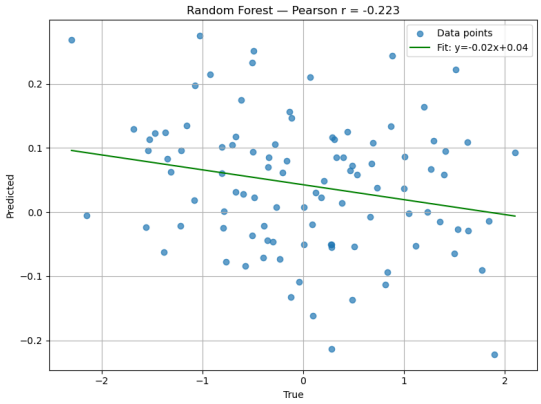

Top 20 Features by Mutual Information with AHI - see
0.20
0.15
0.10
0.05
0.00
chroma2
PXX_range
chroma8
PXX_diff_SMA
mfcc_9
chroma1
dmfcc_0
chroma10
ddmfcc_9
chroma7
PXX_RMS
PXX_mean
ddmfcc_12
PXX_skew
ddmfcc_8
mfcc_3
dmfcc_5
mfcc_2
ddmfcc_5
range

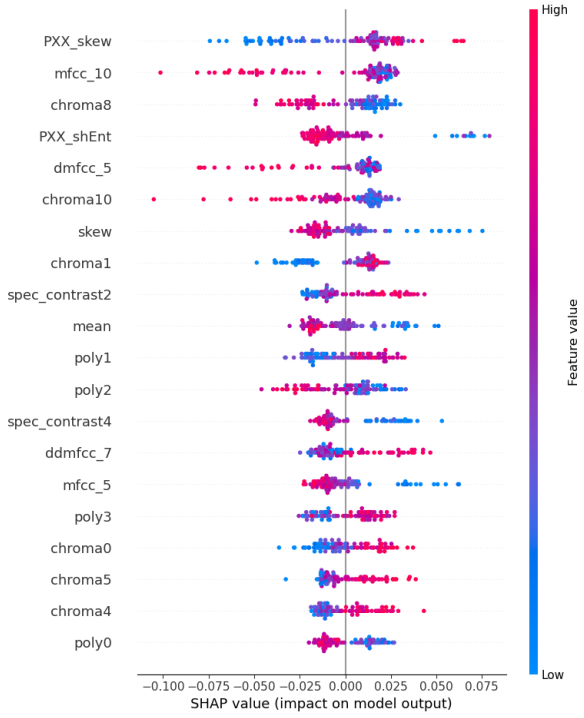

Mean MI
0.125
0.100
0.075
0.050
0.025
0.000
PXX_range
PXX_diff_SMA
chroma2
PXX_RMS
PXX_mean
ddmfcc_12
poly2
dmfcc_5
poly1
chroma7
dmfcc_6
ddmfcc_3
mfcc_1
mfcc_3
dmfcc_2
var
mfcc_9
dmfcc_7
poly0
bandPow0_10
Max MI
0.3
0.2
0.1
0.0
PXX_range
PXX_diff_SMA
chroma2
dmfcc_7
bandPow0_10
chroma7
chroma8
PXX_RMS
dmfcc_2
mfcc_9
dmfcc_6
PXX_mean
poly2
ddmfcc_3
mfcc_7
mfcc_0
var
mfcc_3
mfcc_1
poly1
Rank Aggregation (Borda)
30
20
10
0
PXX_range
PXX_mean
dmfcc_5
ddmfcc_12
PXX_RMS
poly0
poly1
poly2
mfcc_1
dmfcc_6
PXX_diff_SMA
chroma2
poly3
mfcc_12
ddmfcc_3
PXX_skew
mfcc_3
mean
var
ddmfcc_5


Contribution of (Sum of) Feature Groups to Mutual Information
Statistical
21.4%
Spectral
12.2%
4.5%
Temporal
61.8%
Substructural

Random Forest

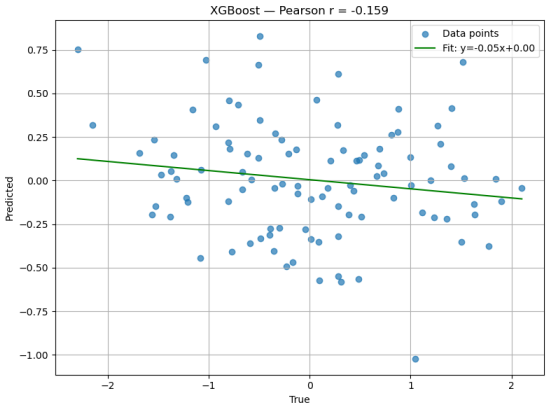
sahh

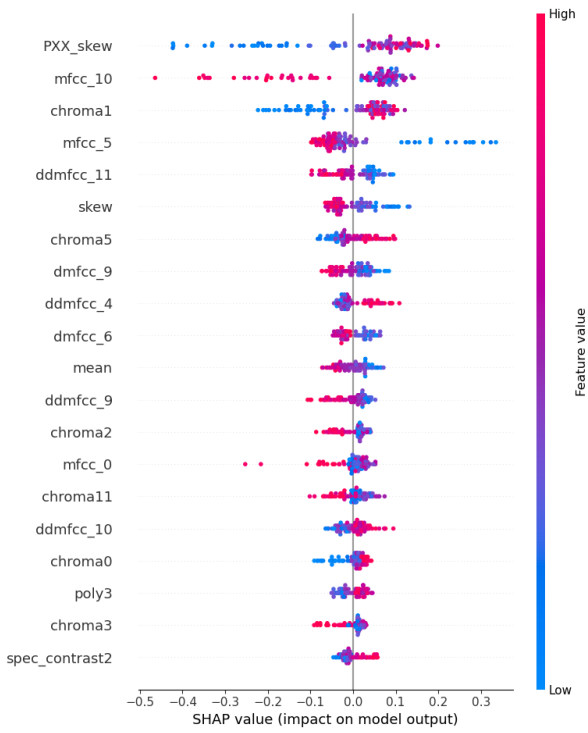


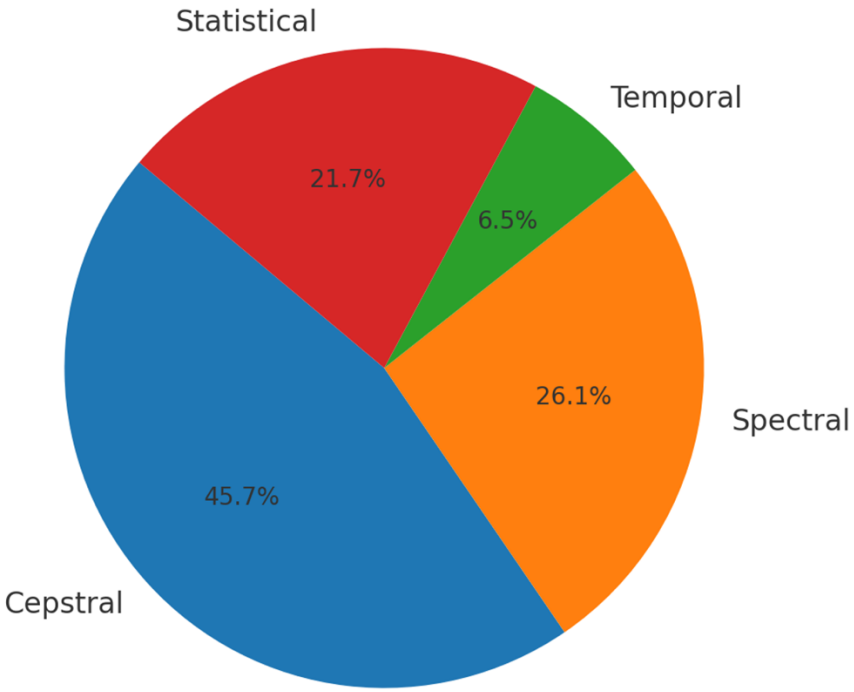


Gradient Boosting

sahh






Statistical
Temporal
21.7%
6.5%
26.1%
Spectral
45.7%
Cepstral