Gradient boosting	Raw / 0.4	Filter / 0.4	ASR / 0.4
All channel&all feature	0.49	0.44	0.24
F part channel&all feature	0.53	0.38	0.24
All channel &hybrid feature	0.58	0.47	0.29
F part channel&hybrid feature	0.47	0.47	0.2

Decision Tree	Raw / 0.4	Filter / 0.4	ASR / 0.4
All channel&all feature	0.56	0.44	0.24
F part channel&all feature	0.4	0.4	0.29
All channel &hybrid feature	0.44	0.47	0.18
F part channel&hybrid feature	0.42	0.4	0.24

(準確率浮動較大)

KNN	Raw / 0.4	Filter / 0.4	ASR / 0.4
All channel&all feature	0.18	0.29	0.29
F part channel&all feature	0.24	0.29	0.24
All channel &hybrid feature	0.33	0.31	0.18
F part channel&hybrid feature	0.38	0.29	0.24

(準確率穩定)

各類情緒分類

Gradient boosting	Boring	Calm	Horror	Funny
All channel&all feature_raw	0.45	0.54	0.38	0.6
F part channel&all feature_raw	0.71	0.4	0.46	0.7
All channel &hybrid feature_raw	0.5	0.78	0.42	0.73
F part channel&hybrid feature_raw	0.33	0.54	0.46	0.5
All channel&all feature_filtered	0.5	0.58	0.29	0.5
F part channel&all feature_filtered	0.71	0.62	0.22	0.25
All channel &hybrid feature_filtered	0.62	0.55	0.33	0.45
F part channel&hybrid feature_filtered	0.83	0.43	0.33	0.5
All channel&all feature_ asr	0.3	0.31	0.1	0.25
F part channel&all feature_ asr	0.25	0.42	0	0.3
All channel &hybrid feature_asr	0.36	0.36	0.18	0.25
F part channel&hybrid feature_asr	0.18	0.36	0	0.22

各類情緒分類

Decision Tree	Boring	Calm	Horror	Funny
All channel&all feature_raw	0.64	0.62	0.42	0.55
F part channel&all feature_raw	0.4	0.46	0.36	0.38
All channel &hybrid feature_raw	0.33	0.5	0.36	0.67
F part channel&hybrid feature_raw	0.36	0.67	0.36	0.67
All channel&all feature_filtered	0.67	0.47	0.27	0.56
F part channel&all feature_filtered	0.29	0.43	0.45	0.38
All channel &hybrid feature_ filtered	0.5	0.43	0.4	0.5
F part channel&hybrid feature_ filtered	0.36	0.42	0.44	0.38
All channel&all feature_ asr	0.56	0.2	0.2	0.09
F part channel&all feature_ asr	0.5	0.12	0.29	0.23
All channel &hybrid feature_ asr	0.27	0.11	0.22	0.08
F part channel&hybrid feature_ asr	0.33	0.1	0.2	0.31

KNN	Boring	Calm	Horror	Funny
All channel&all feature_raw	0.38	0.15	0.17	0
F part channel&all feature_raw	0.38	0.22	0.25	0.17
All channel &hybrid feature_raw	0.44	0.33	0.31	0.2
F part channel&hybrid feature_raw	0.38	0.32	0.44	0.5
All channel&all feature_filtered	0.57	0.25	0.18	0.27
F part channel&all feature_filtered	0.3	0.32	0.38	0.12
All channel &hybrid feature_ filtered	0.3	0.27	0.29	0.38
F part channel&hybrid feature_ filtered	0.33	0.28	0.5	0.22
All channel&all feature_ asr	0.31	0.26	0.33	0.29
F part channel&all feature_ asr	0.27	0.28	0	0.2
All channel &hybrid feature_ asr	0.09	0.21	0.5	0.12
F part channel&hybrid feature_ asr	0.31	0.21	0.25	0.18

Model	Accuracy	precision	recall	F1 Score
Gradient boosting	0.58	0.61	0.58	0.57
Decision Tree	0.56	0.59	0.56	0.56
KNN	0.38	0.41	0.29	0.29

Model	Mean Accuracy	STD
Gradient boosting	0.715	0.102
Decision Tree	0.107	0.060
KNN	0.402	0.157