Additional Metrics of Affective State Prediction

Performance for the prediction of three classes (low, medium, high) of valence, arousal, and dominance. AUC_{micro} and $F1_{micro}$ represent micro-averaged AUC and F1-score, respectively. AUC_{macro} and $F1_{macro}$ represent macro-averaged AUC and F1-score, respectively. The chance level of accuracy and F1-score is 0.33, of AUC it is 0.5, and of Cohen'ts kappa it is 0.

Dimension	Heat Map	AUC_{micro}	AUC_{macro}	Accuracy	$F1_{micro}$	$F1_{macro}$	Cohen's kappa
Valence	Keystrokes	0.82	0.76	66%	0.66	0.53	0.33
	Sensors	0.79	0.73	63%	0.64	0.48	0.27
	Combination	0.83	0.78	70%	0.70	0.57	0.40
Arousal	Keystrokes	0.81	0.80	63%	0.63	0.60	0.42
	Sensors	0.83	0.82	64%	0.64	0.61	0.43
	Combination	0.85	0.84	65%	0.65	0.64	0.46
Dominance	Keystrokes	0.82	0.79	67%	0.67	0.62	0.46
	Sensors	0.81	0.79	63%	0.63	0.59	0.39
	Combination	0.84	0.82	68%	0.68	0.64	0.47