Complementary information B

Signal	Feature
EMG MF (EMG_MF_)	Activations_N; MaxPeakAct_Kurt; MeanPeaksAct_Mean
EMG TR (EMG_TR_)	Duration_Skew; all_Amplitude_Kurt; Area_Skew
EDA (EDA_)	Tonic_Mean; Tonic_Std; Tonic_Skew; SCR_Amplitude_Kurt; SCR_RecoveryTime_Mean
ECG (ECG_)	Tduration_Skew; Tduration_Kurt
ECG (HRV_)	pNN20; HFn; SD1SD2; CSI_Modified; PIP; PI

Table 1 - Optimal subset of features for Dataset1 using the discrete-based emotional model.

Signal	Feature
EMG MF (EMG_MF_)	Activations_N; Duration_Mean; Duration_Skew; MeanPeaksAct_Mean; all_Amplitude_Skew; all_Amplitude_Kurt; Area_Skew; Area_Kurt
EMG TR (EMG_TR_)	Duration_Std; Duration_Kurt; MaxPeakAct_Mean; MaxPeakAct_Skew; all_Amplitude_Skew; Area_Skew; Area_Kurt
EDA (EDA_)	Symp; SympN; Tonic_Mean; Tonic_Std; Tonic_Skew; Phasic_Mean; Phasic_Skew; Phasic_Kurt; SCR_Height_Kurt; SCR_Amplitude_Kurt; SCR_RiseTime_Mean; SCR_RiseTime_Skew; SCR_RiseTime_Kurt
ECG (ECG_)	Rate_Skew; Tduration_Mean; Tduration_Var; Tduration_Skew; Tduration_Kurt;
ECG (HRV_)	MedianNN; IQRNN; pNN20; LF; VHF; HFn; SD1SD2; CSI_Modified; PIP; PI; Ca; ApEn; SampEn

Table 2 - Optimal subset of features for Dataset2 using the discrete-based emotional model.

Signal	Feature
EMG MF (EMG_MF_)	Duration_Mean; Duration_Skew; Duration_Kurt; MaxPeakAct_Var; MaxPeakAct_Skew; MaxPeakAct_Kurt; MeanPeaksAct_Mean; all_Amplitude_Skew; all_Amplitude_Kurt; Area_Skew; Area_Kurt
EMG TR (EMG_TR_)	Activations_N; Duration_Std; Duration_Skew; Duration_Kurt; MaxPeakAct_Mean; MaxPeakAct_Skew; MeanPeaksAct_Kurt; all_Amplitude_Skew; all_Amplitude_Kurt; Area_Skew; Area_Kurt
EDA (EDA_)	Symp; SympN; Tonic_Mean; Tonic_Std; Tonic_Skew; Tonic_Kurt; Phasic_Mean; Phasic_Skew; Phasic_Kurt; SCR_Amplitude_Kurt; SCR_RiseTime_Skew; SCR_RiseTime_Kurt; SCR_RecoveryTime_Mean; SCR_RecoveryTime_Skew; SCR_RecoveryTime_Kurt
ECG (ECG_)	Rate_Skew; Tduration_Mean; Tduration_Var; Tduration_Skew; Tduration_Kurt
ECG (HRV_)	IQRNN; pNN20; TINN; LF; VHF; HFn; LnHF; SD1SD2; CSI_Modified; PIP; PAS; GI; Ca; ApEn; SampEn

Table 3 - Optimal subset of features for Dataset2 using the valence-based emotional model.

Signal	Feature
EMG MF (EMG_MF_)	Activations_N; Duration_Mean; MaxPeakAct_Kurt; all_Amplitude_Skew; Area_Skew
EMG TR (EMG_TR_)	Activations_N; Duration_Std; Duration_Kurt; MaxPeakAct_Mean
EDA (EDA_)	SympN; Tonic_Mean; Tonic_Std; Phasic_Skew; SCR_Amplitude_Kurt; SCR_RiseTime_Mean; SCR_RiseTime_Skew; SCR_RecoveryTime_Kurt
ECG (ECG_)	Tduration_Var; Tduration_Kurt
ECG (HRV_)	pNN50; pNN20; VHF; CSI_Modified; PI; ApEn; SampEn

Table 4 - Optimal subset of features for Dataset2 using the arousal-based emotional model.