Python 3.12

MATLAB R2022a(EEGLAB 2022, Ledalab 3.4.9)

Kubios HRV 3.5

Python libs

numpy==1.26.4

pandas==2.2.2

matplotlib==3.9.2

scikit-learn==1.5.0

imbalanced-learn==0.13.0 # SMOTE

xgboost==3.0.3

lightgbm==4.6.0

bayesian-optimization==1.5.0

plyer==2.1.0

preprocessing parameters:

ECG/HRV: Kubios 3.5; threshold-based artifact correction (0.15 s)

EEG: EEGLAB 2022.0; FP1, 512 Hz; 0.5–30 Hz band-pass; baseline correction over 0–500 ms

EDA: Ledalab 3.4.9; 4 Hz; Butterworth low-pass filter at 0.3 Hz, 4th order