

**Supplementary Table 1. Model performance training for Parkinson's disease classification**

Model performance		LR		NB		RF	
		AUC	ACC	AUC	ACC	AUC	ACC
<b>Finger tapping</b>							
Single hand (unilateral)	Amplitude_mean	0.545	0.538	0.399	0.461	0.476	0.482
	Amplitude_std	0.351	0.405	0.355	0.438	0.471	0.481
	Speed	0.550	0.535	0.569	0.518	<b>0.673</b>	<b>0.614</b>
	Fatigue	0.369	0.415	0.521	0.468	0.503	0.497
Two-hands (bilateral)	Amplitude_mean	<b>0.634</b>	<b>0.567</b>	0.506	0.531	0.402	0.44
	Amplitude_std	0.346	0.401	0.434	0.479	0.359	0.401
	Speed	0.427	0.465	0.433	0.409	0.528	0.509
	Fatigue	0.597	0.588	0.532	0.536	0.522	0.509
<b>Hand movements</b>							
Single hand (unilateral)	Amplitude_mean	0.427	0.435	0.320	0.365	0.291	0.324
	Amplitude_std	<b>0.663</b>	<b>0.675</b>	<b>0.651</b>	<b>0.620</b>	<b>0.615</b>	<b>0.567</b>
	Speed	<b>0.705</b>	<b>0.646</b>	0.526	0.520	0.558	0.567
	Fatigue	0.352	0.379	0.547	0.517	0.462	0.454
Two-hands (bilateral)	Amplitude_mean	0.576	0.582	<b>0.616</b>	<b>0.575</b>	0.389	0.43
	Amplitude_std	<b>0.679</b>	<b>0.675</b>	<b>0.640</b>	<b>0.617</b>	0.593	0.595
	Speed	0.482	0.529	0.467	0.455	0.518	0.513
	Fatigue	<b>0.715</b>	<b>0.637</b>	<b>0.729</b>	<b>0.629</b>	<b>0.738</b>	<b>0.651</b>
<b>Pronation-supination movement of the hands</b>							
Single hand (unilateral)	Amplitude_mean	<b>0.692</b>	<b>0.636</b>	0.587	0.525	0.553	0.535
	Amplitude_std	<b>0.793</b>	<b>0.709</b>	<b>0.807</b>	<b>0.745</b>	<b>0.807</b>	<b>0.715</b>
	Speed	0.486	0.507	0.467	0.469	0.481	0.507
	Fatigue	0.497	0.514	<b>0.620</b>	<b>0.561</b>	0.449	0.444
Two-hands (bilateral)	Amplitude_mean	0.486	0.494	0.437	0.464	<b>0.605</b>	<b>0.603</b>
	Amplitude_std	0.590	0.545	0.525	0.556	0.489	0.495
	Speed	0.340	0.385	0.533	0.560	0.409	0.444
	Fatigue	0.594	0.573	<b>0.617</b>	<b>0.565</b>	<b>0.786</b>	<b>0.732</b>

Classification results of the combined right and left motor features for Parkinson's disease classification prediction. The training of the model was made using three classifiers: Logistic regression (LR), Gaussian Naïve-Bayes (NB) and Random Forest (RF). Features with cross-validation AUC > 0.6 are highlighted in bold. Units: Normalized amplitude[0-1] for finger tapping and hand movements; Amplitude (degrees) for pronation supination for amplitude features. Time (frames), for speed in all tasks. AUC, cross-validation area under curve; ACC; accuracy