

The New Dataset

The Parkinson's Telemonitoring Dataset, which was obtained from the UCI Machine Learning Repository, is the novel dataset used in this investigation. Athanasios Tsanas and Max A. Little, working with doctors at the University of Oxford, first put it together. 42 patients with early-stage Parkinson's disease provided biological voice measures for the dataset. It has two clinical scores that are used to gauge the disease's progression: the motor Unified Parkinson's Disease Rating Scale (UPDRS) and the total Unified Parkinson's Disease Rating Scale (total_UPDRS).

- **Type of Data:** Time-series, longitudinal clinical data
- **Number of Instances:** 5,875
- **Number of Features:** 16 biomedical voice features + 2 UPDRS scores
- **Labeling Method:** Binary classification label was derived using the median of motor_UPDRS
- **Use Case:** This dataset enables longitudinal modeling and prediction of Parkinson's progression using real-world data.

Source: <https://archive.ics.uci.edu/dataset/222/parkinson+s+telemonitoring>

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
	parkinsons_updrs															
1	subject#	age	sex	test_time	motor_UPDRS	total_UPDRS	Jitter(%)	Jitter(Abs)	Jitter:RAP	Jitter:PPQ5	Jitter:DDP	Shimmer	Shimmer(dB)	Shimmer:APQ3	Shimmer:APQ5	Shir
2	1	72	0	5.6431	28.199	34.398	0.00662	3.38e-05	0.00401	0.00317	0.01204	0.02565	0.23	0.01438	0.01309	
3	1	72	0	12.666	28.447	34.894	0.003	1.68e-05	0.00132	0.0015	0.00395	0.02024	0.179	0.00994	0.01072	
4	1	72	0	19.681	28.695	35.389	0.00481	2.462e-05	0.00205	0.00208	0.00616	0.01675	0.181	0.00734	0.00844	
5	1	72	0	25.647	28.905	35.81	0.00528	2.657e-05	0.00191	0.00264	0.00573	0.02309	0.327	0.01106	0.01265	
6	1	72	0	33.642	29.187	36.375	0.00335	2.014e-05	0.00093	0.0013	0.00278	0.01703	0.176	0.00679	0.00929	
7	1	72	0	40.652	29.435	36.87	0.00353	2.29e-05	0.00119	0.00159	0.00357	0.02227	0.214	0.01006	0.01337	
8	1	72	0	47.649	29.682	37.363	0.00422	2.404e-05	0.00212	0.00221	0.00637	0.04352	0.445	0.02376	0.02621	
9	1	72	0	54.64	29.928	37.857	0.00476	2.471e-05	0.00226	0.00259	0.00678	0.02191	0.212	0.00979	0.01462	
10	1	72	0	61.669	30.177	38.353	0.00432	2.854e-05	0.00156	0.00207	0.00468	0.04296	0.371	0.01774	0.02134	
11	1	72	0	68.688	30.424	38.849	0.00496	2.702e-05	0.00258	0.00253	0.00773	0.0361	0.31	0.0203	0.0197	
12	1	72	0	75.653	30.67	39.34	0.00465	2.553e-05	0.00238	0.0026	0.00715	0.02132	0.188	0.01069	0.01214	
13	1	72	0	82.653	30.917	39.834	0.00537	3.216e-05	0.00236	0.00278	0.00709	0.02377	0.282	0.01001	0.01375	
14	1	72	0	89.635	31.309	40.412	0.00524	3.287e-05	0.00235	0.00251	0.00704	0.02493	0.24	0.01176	0.01395	
15	1	72	0	96.633	31.776	41.034	0.00354	2.388e-05	0.00142	0.0015	0.00427	0.02107	0.171	0.00847	0.0104	
16	1	72	0	103.64	32.243	41.657	0.0053	3.181e-05	0.00241	0.00231	0.00724	0.02791	0.291	0.0131	0.0126	
17	1	72	0	110.65	32.71	42.28	0.00456	2.908e-05	0.00152	0.00194	0.00457	0.02878	0.264	0.01379	0.01494	
18	1	72	0	117.66	33.178	42.904	0.00693	3.93e-05	0.00329	0.00285	0.00987	0.0281	0.274	0.01468	0.0143	
19	1	72	0	124.64	33.643	43.524	0.00652	3.783e-05	0.00313	0.00311	0.0094	0.03011	0.32	0.01603	0.01733	
20	1	72	0	131.64	34.109	44.146	0.00571	3.711e-05	0.00296	0.00293	0.00889	0.02522	0.223	0.0126	0.01466	
21	1	72	0	139.69	34.646	44.861	0.00372	2.221e-05	0.00181	0.00195	0.00542	0.0323	0.288	0.01458	0.01732	
22	1	72	0	145.64	35.043	45.39	0.00285	1.646e-05	0.00079	0.00109	0.00237	0.01524	0.133	0.00567	0.00682	
23	1	72	0	152.64	35.509	46.013	0.00629	3.574e-05	0.00278	0.00293	0.00835	0.03791	0.338	0.01915	0.02174	
24	1	72	0	159.64	35.976	46.635	0.00375	2.221e-05	0.00157	0.00175	0.00471	0.02477	0.244	0.0112	0.01283	
25	1	72	0	174.66	36.977	47.97	0.00386	2.259e-05	0.00178	0.00195	0.00535	0.02842	0.295	0.01312	0.01514	
26	1	72	0	5.6431	28.199	34.398	0.00348	1.547e-05	0.00124	0.00133	0.00372	0.01192	0.113	0.00411	0.00463	
27	1	72	0	12.667	28.447	34.894	0.0095	5.884e-05	0.00446	0.00457	0.01337	0.03337	0.411	0.01828	0.01899	
28	1	72	0	19.682	28.695	35.389	0.00401	2.413e-05	0.00149	0.00185	0.00446	0.01508	0.16	0.00623	0.00768	
29	1	72	0	25.647	28.905	35.81	0.0034	2.05e-05	0.00178	0.00162	0.00533	0.01452	0.157	0.00711	0.00765	