

l-gmm-out_5d4f

Features
Maximum number of features considered

Counter with 1-gmm and 5-df
100

Logistic Regression

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 0.04752	601	1548	417	574	0.69031	0.61317	0.55222	0.57195
2	200 0.03862	703	1516	411	581	0.69244	0.62544	0.55661	0.58022
3	200 0.03689	691	1542	422	583	0.68531	0.60671	0.5267	0.56388
4	200 0.04769	724	1473	461	542	0.68856	0.61097	0.57186	0.56078
5	200 0.04306	809	1520	397	633	0.68063	0.62967	0.50809	0.56287
Average	0.04346	679.4	1519.8	421.6	579.2	0.68725	0.61719	0.56906	0.57862

S2D Classifier

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 0.03584	673	1289	676	362	0.67563	0.59339	0.55582	0.52716
2	200 0.04108	680	1709	238	783	0.68408	0.67797	0.38055	0.46705
3	200 0.04108	680	1618	346	643	0.68094	0.67152	0.47977	0.54529
4	200 0.04957	698	1318	616	450	0.68	0.59209	0.67773	0.59239
5	200 0.0462	822	1209	598	741	0.67532	0.60461	0.43891	0.51517
Average	0.04472	671.2	1508.6	425.8	587.4	0.68019	0.62092	0.52427	0.58019

Linear SVC

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 0.03584	687	1525	460	541	0.67573	0.59586	0.55582	0.56771
2	200 0.03584	718	1520	417	545	0.68038	0.6236	0.55949	0.58051
3	200 0.03584	673	1520	417	545	0.68038	0.6236	0.55949	0.58051
4	200 0.03584	710	1511	422	561	0.68094	0.62333	0.55920	0.58052
5	200 0.03584	672	1523	384	621	0.68094	0.62636	0.51977	0.57316
Average	0.03584	690	1522.8	416.6	568.6	0.67815	0.62252	0.56878	0.58038

Naive Bayes

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 34.066	690	1363	602	545	0.64156	0.53406	0.5587	0.5461
2	200 33.066	688	1401	536	575	0.65281	0.56209	0.54473	0.55328
3	200 32.303	709	1395	566	467	0.67625	0.57474	0.62217	0.59751
4	200 33.708	686	1394	540	498	0.67563	0.58716	0.60564	0.59874
5	200 33.6534	682	1468	439	611	0.67188	0.60809	0.52746	0.59504

SVC (gamma=0.5)

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 37.3452	23	1888	77	1012	0.03699	0.74333	0.18057	0.20055
2	200 36.8286	23	1846	91	1040	0.04856	0.71019	0.17895	0.20282
3	200 36.5314	193	1875	89	1043	0.04625	0.68044	0.12615	0.25428
4	200 37.8508	236	1831	103	1030	0.04594	0.69617	0.18841	0.23948
5	200 36.4291	210	1830	77	1083	0.03375	0.73171	0.16241	0.20582
Average	0.04608	690	1503	602	543	0.68106	0.53406	0.5387	0.5401

Decision Tree

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 0.04607	879	1197	768	356	0.64875	0.5337	0.71174	0.60509
2	200 0.04606	893	1176	761	360	0.64869	0.54267	0.71496	0.61701
3	200 0.04707	894	1185	779	342	0.64869	0.53437	0.7233	0.61464
4	200 0.04706	922	1195	739	344	0.66156	0.55509	0.72828	0.63
5	200 0.04707	920	1157	750	373	0.64906	0.5509	0.71152	0.62059

Random Forest (10 estimators)

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 0.05206	904	1516	449	251	0.78125	0.68657	0.73676	0.73763
2	200 0.05859	953	1530	407	310	0.77594	0.70074	0.75455	0.72655
3	200 0.01767	919	1543	421	317	0.76938	0.68562	0.74353	0.71351
4	200 0.07987	1021	1487	447	245	0.78375	0.6955	0.80648	0.74689
5	200 0.06502	951	1519	388	342	0.77188	0.71023	0.7355	0.72264

AdaBoost

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 0.45514	975	1500	415	260	0.78906	0.70144	0.78947	0.74286
2	200 0.44223	968	1506	381	297	0.78813	0.71715	0.78485	0.74023
3	200 0.44175	1012	1615	349	324	0.78969	0.72324	0.73786	0.73048
4	200 0.45774	983	1573	361	283	0.79875	0.7314	0.77646	0.75326
5	200 0.46735	983	1559	348	303	0.78813	0.73485	0.74478	0.73963

XGBost

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 1.74294	618	1552	385	645	0.67813	0.61615	0.48931	0.54545
2	200 1.75186	657	1548	417	578	0.68006	0.61173	0.53198	0.56908
3	200 1.71102	628	1572	392	608	0.6875	0.61569	0.50809	0.55674
4	200 1.83735	630	1554	388	636	0.6825	0.62306	0.48763	0.55536
5	200 1.86708	626	1555	352	667	0.68156	0.64008	0.48415	0.5513

Multi-layer Perceptrons

Feature number	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	
1	200 0.04605	570	1603	272	685	0.70719	0.67696	0.48154	0.54687
2	200 0.28505	576	1616	321	687	0.685	0.64214	0.45066	0.53333
3	200 0.40513	546	1673	291	690	0.69344	0.65233	0.44175	0.52677
4	200 0.47651	556	1651	283	710	0.68669	0.62369	0.43918	0.52627
5	200 0.44969	528	1672	235	765	0.6875	0.69201	0.40355	0.51362

Features
Counter with 1-gmm and 5-df
1000

Logistic Regression

1	2000	0.12193	776	1528	397	499	0.72	0.61555	0.48881	0.60399	1	10000	0.27046
2	2000	0.08735	796	1500	380	494	0.74295	0.67867	0.64784	0.65864	2	10000	0.24604
3	2000	0.10195	782	1550	383	475	0.72875	0.68053	0.62212	0.64308	3	10000	0.2788
4	2000	0.11095	784	1572	378	466	0.73525	0.6747	0.62172	0.65058	4	10000	0.2426
5	2000	0.09794	795	1524	406	476	0.72469	0.6825	0.62549	0.64346	5	10000	0.24712
Average		0.10003	786.6	1500.8	390.6	472	0.73449	0.68623	0.62027	0.64891	Average		0.25733

S2D Classifier

Feature	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	Feature	Time to 1 TP	
1	2000 0.3073	950	1356	569	191	0.7225	0.63089	0.7498	0.65826	1	10000 1.42951
2	2000 0.29483	945	1368	355	201	0.7334	0.67346	0.6956	2	10000 1.34912	
3	2000 0.29787	836	1493	450	421	0.72781	0.68593	0.68749	3	10000 1.41896	
4	2000 0.27294	842	1495	458	408	0.73303	0.69419	0.6736	4	10000 1.32338	
5	2000 0.26595	950	1311	618	275	0.72504	0.6171	0.75363	0.69047	5	10000 1.33146
Average	0.28262	873.8	1452.6	468.8	304.8	0.7277	0.66417	0.68362	0.65021	Average	1.37647

Linear SVC

Feature	Time to 1 TP	FP	FN	ACC	Precision	Recall	F1-Score	Time to 1 TP
1	2000 0.12193	840	1462	423	0.72875	0.65996	0.63982	0.63934
2	2000 0.08197	824	1515	445	0.73594	0.66623	0.68452	0.65884
3	2000 0.09195	830	1510	433	0.73459	0.66423	0.66882	0.64714
4	2000 0.09195	835	1511	409	0.74094	0.66629	0.654	0.65905
5	2000 0.09194	855	1484	445	0.73406	0.66621	0.68257	0.67028
Average	0.10003	817.6	1506.4	433	0.73543	0.66826	0.66548	0.66232
								Average 0.7097

Naive Bayes

Feature	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	Feature	Time to 1 TP	
1	2000 0.08676	1041	833	1002	231	0.58656	0.48876	0.81382	0.61214	1	10000 1.64595
2	2000 0.070195	1012	863	1097	228	0.58594	0.47985	0.81613	0.60436	2	10000 1.42999
3	2000 0.07414	1010	960	1033	247	0.6	0.49437	0.8036	0.62143	3	10000 1.66447
4	2000 0.07696	1039	788	1162	211	0.57094	0.47206	0.8312	0.60214	4	10000 1.64312
5	2000 0.08191	1045	771	1156	206	0.57375	0.47608	0.83762	0.60962	5	10000 1.43431
Average	0.08003	1030.6	866.6	1070.2	226.8	0.58544	0.48623	0.82027	0.61891		

Decision Tree

Feature #	Time In T	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	Feature #	Time In T
1	2000 26.6099	1143	1500	425	132	0.82964	0.72895	0.80408	1	10000 39.9959
2	2000 26.6099	1132	1534	426	108	0.83313	0.72057	0.80129	2	10000 62.9327
3	2000 23.6805	1124	1537	406	133	0.83105	0.73464	0.89419	3	10000 60.8623
4	2000 25.3438	1141	1560	390	109	0.84406	0.74826	0.87328	4	10000 59.0107
5	2000 25.0356	1139	1482	447	132	0.81906	0.78116	0.89514	5	10000 59.401
Average	0.10003	1139	1482	447	132	0.83544	0.73525	0.82027		

Random Forest (10 estimators)

Feature #	Time to 1 TP	TN	FP	FN	Accuracy	Precision	Recall	F1-Score	Feature #	Time to 1 TP
1	2000 0.40624	1132	1655	270	143	0.87094	0.84572	0.85874	1	10000 0.19136
2	2000 0.04713	1120	1684	276	120	0.85026	0.80229	0.90323	2	10000 0.0823
3	2000 0.38578	1095	1655	288	162	0.87638	0.79195	0.87112	3	10000 0.0377
4	2000 0.12551	1099	1639	311	151	0.85035	0.77943	0.8792	4	10000 0.28639
5	2000 0.11991	1092	1640	289	179	0.85375	0.75073	0.85917	5	10000 0.06095