SUPPORT VECTOR MACHINES

Abhishek Madiraju

Email: am2359@njit.edu NJIT ID: 31389998

ERROR USING LINEAR KERNEL

DATASET	ACCURACY	ERROR
Antivirus	0.98974359	0.01025641
Bach_Choral	0.971126761	0.028873239
Banknote	0.989855072	0.010144928
Breast_Cancer	0.953448276	0.046551724
Chronic_Kidney	0.9725	0.0275
Climate	0.956363636	0.043636364
cnae9	0.983333333	0.016666667
diabetic_retinopathy	0.750862069	0.249137931
eeg_eye_state	0.635701561	0.364298439
fertility	0.818181818	0.181818182
forest	0.896226415	0.103773585
gesture	0.886363636	0.113636364
grammatical_facial	0.716981132	0.283018868
heart	0.75	0.25
hepmass	0.839160839	0.160839161
hill_valley	0.990322581	0.009677419
indian_liver_patient	0.708474576	0.291525424
insurance-company-	0.939622642	0.060377358
coil2000		
ionosphere	0.847222222	0.152777778
isolet	0.995512821	0.004487179
libras	0.981081081	0.018918919
mfeat	0.9965	0.0035
mhealth	0.789010989	0.210989011
micromass	0.940425532	0.059574468
mlprove	0.718433931	0.281566069
musk	0.85	0.15
occupancy	0.985814186	0.014185814
ozone	0.934594595	0.065405405
parkinson2	0.616346154	0.383653846
parkinsons	0.88	0.12
phishing_websites	0.948582996	0.051417004
planning_relax	0.684210526	0.315789474
qsar_biodeg	0.855660377	0.144339623
seeds	0.90952381	0.09047619
seismic	0.930501931	0.069498069
smartphone	1	0
sonar	0.804545455	0.195454545
spambase	0.93318872	0.06681128
student_alcohol	0.718181818	0.281818182

0.07106000	
0.85106383	0.14893617
0.834665335	0.165334665
0.886956522	0.113043478
0.832258065	0.167741935
0.750549451	0.249450549
0.988275862	0.011724138
AVERAGE	0.130561432
	0.886956522 0.832258065 0.750549451 0.988275862

ERROR USING RADIAL KERNEL

DATASET	ACCURACY	ERROR
Antivirus	0.805128205	0.194871795
bach_choral	0.967253521	0.032746479
Banknote	1	0
breast_cancer	0.620689655	0.379310345
chronic_kidney	0.625	0.375
climate	0.921818182	0.078181818
cnae9	0.900925926	0.099074074
diabetic_retinopathy	0.537068966	0.462931034
fertility	0.818181818	0.181818182
forest	0.622641509	0.377358491
gesture	0.886363636	0.113636364
grammatical_facial	0.716981132	0.283018868
heart	0.785714286	0.214285714
hill_valley	0.49516129	0.50483871
indian_liver_patient	0.722033898	0.277966102
insurance-company-	0.93464837	0.06535163
coil2000		
ionosphere	0.933333333	0.066666667
isolet	0.961538462	0.038461538
libras	0.97027027	0.02972973
mfeat	0.9	0.1
micromass	0.617021277	0.382978723
mlprove	0.776508972	0.223491028
musk	0.5625	0.4375
ozone	0.92972973	0.07027027
parkinson2	0.5	0.5
parkinsons	0.75	0.25
phishing_websites	0.969230769	0.030769231
planning_relax	0.694736842	0.305263158
qsar_biodeg	0.693396226	0.306603774
seeds	0.842857143	0.157142857
sonar	0.863636364	0.136363636
student_alcohol	0.696969697	0.303030303
susy	0.749	0.251
thoraric	0.85106383	0.14893617
wall_follow	0.759340659	0.240659341
	AVERAGE	0.217693029