Table 1: Performance Results for SVM_100samples_5features_C1 Problem

Optimizer	Mean Final	Std Dev	Best	Worst	Mean Func	Success	Mean Time
	Value		Value	Value	Evals	Rate (%)	(s)
Adam-	6.43e-1	1.44e-5	6.43e-1	6.43e-1	1984.2	90.0	0.702
AMSGrad							
Adam	6.43e-1	5.18e-7	6.43e-1	6.43e-1	1826.7	100.0	0.646
Adam-Robust	6.43e-1	1.65e-4	6.43e-1	6.44e-1	1414.2	50.0	0.499
Adam-	6.43e-1	1.36e-6	6.43e-1	6.43e-1	628.6	100.0	0.225
WeightDecay					·		
GD	6.43e-1	1.32e-6	6.43e-1	6.43e-1	274.4	100.0	0.153
L-BFGS-	6.43e-1	1.94e-5	6.43e-1	6.43e-1	444.7	90.0	0.095
Limited	0.40		0.40.4	0.40	o= o	1000	
GD-	6.43e-1	2.96e-6	6.43e-1	6.43e-1	97.2	100.0	0.055
WeightDecay	0.40		0.40.4	0.40	222.0		0.040
QQN-	6.43e-1	1.87e-5	6.43e-1	6.43e-1	228.9	90.0	0.046
GoldenSection	0.40		0.40	0.40	400 =	1000	0.045
L-BFGS-	6.43e-1	1.59e-5	6.43e-1	6.43e-1	133.7	100.0	0.045
Conservative	0.40.1	1 00 -	0.40.1	0.40.1	00.4	100.0	0.040
QQN-Bisection-	6.43e-1	1.39e-5	6.43e-1	6.43e-1	83.4	100.0	0.040
1	2.02.0	1.05.0	0.45 1	0.00.0	104 5	0.0	0.000
Trust Region-	2.82e0	1.25e0	6.45e-1	3.96e0	134.5	0.0	0.038
Conservative	6.49 1	1.00 =	C 40 1	C 40 1	60.0	100.0	0.000
QQN-Bisection-	6.43e-1	1.80e-5	6.43e-1	6.43e-1	68.8	100.0	0.030
2 OON	C 49 - 1	7.64- 7	C 49 - 1	C 49 - 1	C1 C	100.0	0.096
QQN-	6.43e-1	7.64e-7	6.43e-1	6.43e-1	61.6	100.0	0.026
CubicQuadraticInt	-	1 49 - 5	C 49 - 1	C 49 - 1	F7 F	100.0	0.000
QQN-	6.43e-1	1.43e-5	6.43e-1	6.43e-1	57.5	100.0	0.022
StrongWolfe GD-Nesterov	6.64e-1	T 00 - 2	6.50e-1	6.76e-1	05.1	0.0	0.014
GD-Nesterov GD-Momentum	6.73e-1	5.99e-3			25.1	$0.0 \\ 0.0$	0.014
L-BFGS-		9.01e-3	6.53e-1	6.91e-1	24.9		0.013
MoreThuente	6.43e-1	1.35e-5	6.43e-1	6.43e-1	41.3	100.0	0.013
L-BFGS	6.43e-1	1.38e-12	6.43e-1	6.43e-1	42.0	100.0	0.012
Adam-Fast	6.84e-1	2.44e-2	6.44e-1	7.29e-1	$\frac{42.0}{32.8}$	0.0	0.012 0.012
L-BFGS-	6.43e-1	2.44e-2 1.41e-10	6.44e-1 6.43e-1		32.8 46.0	100.0	0.012 0.011
	0.456-1	1.416-10	0.456-1	6.43e-1	40.0	100.0	0.011
Aggressive Trust Region-	9.38e-1	2.76e-1	6.73e-1	1.58e0	36.2	0.0	0.010
Precise	9.366-1	2.700-1	0.756-1	1.5660	30.2	0.0	0.010
GD-	7.53e-1	2.76e-2	7.12e-1	8.06e-1	17.6	0.0	0.009
AdaptiveMomentu		2.106-2	1.126-1	0.006-1	17.0	0.0	0.003
Trust Region-	4.68e0	6.93e0	7.07e-1	3.43e1	19.0	0.0	0.005
Adaptive	4.0000	0.5000	1.010-1	0.4001	10.0	0.0	0.000
Trust Region-	1.00e3	4.36e3	6.57e-1	2.00e4	16.3	0.0	0.005
Aggressive	1.0000	1.0000	0.010 1	2.000 4	10.0	0.0	0.000
Trust Region-	3.47e2	9.80e2	7.26e-1	3.28e3	15.4	0.0	0.004
Standard	0.1102	5.0002	200 1	3.200	10.1	0.0	0.001