Table 1: Performance Results for NeuralNetwork_100samples_layers_10_20_5 Problem

Optimizer	Mean Final Value	Std Dev	Best Value	Worst Value	Mean Func Evals	Success Rate (%)	Mean Time (s)
GD	1.28e-1	4.01e-3	1.18e-1	1.34e-1	1668.0	0.0	4.458
GD-WeightDecay	9.58e-2	2.99e-3	9.05e-2	1.02e-1	1668.0	0.0	4.432
Adam-AMSGrad	4.96e-2	6.01e-3	3.82e-2	5.96e-2	2495.8	5.0	3.943
Adam-Robust	5.97e-2	5.49e-3	4.85e-2	7.16e-2	2502.0	0.0	3.922
Adam	4.42e-2	4.45e-3	3.82e-2	5.22e-2	2469.9	10.0	3.834
L-BFGS-MoreThuente	6.08e-2	4.08e-3	5.29e-2	6.95e-2	2831.2	0.0	3.733
L-BFGS-Limited	5.06e-2	8.80e-3	4.16e-2	8.19e-2	3290.1	0.0	3.444
L-BFGS-Aggressive	5.60e-2	4.60e-3	4.81e-2	6.46e-2	3655.3	0.0	3.155
L-BFGS-Conservative	4.39e-2	5.59e-3	3.82e-2	5.53e-2	2571.8	20.0	3.085
QQN-GoldenSection	3.83e-2	6.37e-4	3.79e-2	4.07e-2	3686.0	85.0	2.351
Adam-WeightDecay	3.82e-2	1.26e-5	3.82e-2	3.82e-2	1278.0	100.0	2.066
L-BFGS	1.36e-1	1.66e-1	4.42e-2	8.11e-1	1846.8	0.0	2.005
QQN-StrongWolfe	4.07e-2	4.88e-3	3.75e-2	5.26e-2	1111.5	70.0	2.001
QQN-CubicQuadraticInterpolation	3.80e-2	1.40e-4	3.77e-2	3.82e-2	959.5	100.0	1.947
QQN-Bisection-1	3.80e-2	1.20e-4	3.78e-2	3.82e-2	1029.0	100.0	1.615
GD-Nesterov	1.23e-1	5.62e-2	4.04e-2	1.69e-1	596.8	0.0	1.586
QQN-Bisection-2	3.80e-2	1.53e-4	3.77e-2	3.82e-2	883.2	100.0	1.296
GD-Momentum	1.63e-1	2.68e-2	4.69e-2	1.76e-1	102.7	0.0	0.269
Adam-Fast	4.24e-2	5.53e-3	3.71e-2	5.58e-2	168.4	50.0	0.263
Trust Region-Conservative	1.48e-1	5.17e-3	1.28e-1	1.53e-1	122.0	0.0	0.142
GD-AdaptiveMomentum	1.74e-1	5.09e-3	1.66e-1	1.83e-1	15.2	0.0	0.037
Trust Region-Adaptive	1.76e-1	4.58e-2	1.36e-1	3.17e-1	26.9	0.0	0.032
Trust Region-Precise	1.61e-1	2.68e-3	1.54e-1	1.66e-1	23.4	0.0	0.028
Trust Region-Aggressive	7.57e-1	1.49e-1	3.26e-1	1.01e0	7.8	0.0	0.010
Trust Region-Standard	2.74e-1	1.79e-1	2.05e-1	1.05e0	5.3	0.0	0.007