Table 1: Performance Results for NeuralNetwork_100samples_layers_5_10_3 Problem

Optimizer	Mean Final Value	Std Dev	Best Value	Worst Value	Mean Func Evals	Success Rate (%)	Mean Time (s)
QQN-CubicQuadraticInterpolation	1.40e-1	1.86e-3	1.38e-1	1.46e-1	617.1	90.0	0.666
QQN-Bisection-1	1.40e-1	1.77e-3	1.39e-1	1.47e-1	995.0	90.0	0.864
Adam-Fast	1.40e-1	2.71e-3	1.38e-1	1.49e-1	145.4	85.0	0.121
QQN-Bisection-2	1.40e-1	3.24e-3	1.38e-1	1.54e-1	750.6	85.0	0.542
Adam-WeightDecay	1.43e-1	7.02e-3	1.40e-1	1.68e-1	1555.7	85.0	1.287
QQN-GoldenSection	1.41e-1	3.80e-3	1.39e-1	1.55e-1	2473.0	85.0	0.852
QQN-StrongWolfe	1.43e-1	5.71e-3	1.39e-1	1.59e-1	1340.8	60.0	1.277
L-BFGS-Limited	1.48e-1	1.10e-2	1.40e-1	1.83e-1	2753.6	40.0	1.375
L-BFGS-Conservative	1.49e-1	8.52e-3	1.39e-1	1.71e-1	2286.9	30.0	1.481
L-BFGS-Aggressive	1.50e-1	6.91e-3	1.40e-1	1.63e-1	2900.4	15.0	1.375
L-BFGS	2.01e-1	5.93e-2	1.40e-1	3.37e-1	1471.2	10.0	0.854
Adam-AMSGrad	1.55e-1	7.51e-3	1.40e-1	1.67e-1	2490.8	5.0	2.069
L-BFGS-MoreThuente	1.51e-1	6.61e-3	1.41e-1	1.64e-1	2855.0	0.0	1.945
Adam	1.58e-1	6.21e-3	1.45e-1	1.68e-1	2502.0	0.0	2.063
Adam-Robust	1.69e-1	6.95e-3	1.49e-1	1.80e-1	2502.0	0.0	2.074
GD-WeightDecay	1.83e-1	4.09e-3	1.75e-1	1.92e-1	1668.0	0.0	2.353
Trust Region-Adaptive	2.63e-1	9.37e-2	1.83e-1	4.96e-1	56.9	0.0	0.036
Trust Region-Standard	4.50e-1	6.70e-1	1.89e-1	2.92e0	39.2	0.0	0.025
GD	2.01e-1	2.75e-3	1.95e-1	2.06e-1	1668.0	0.0	2.332
Trust Region-Aggressive	1.30e0	2.13e0	2.02e-1	1.04e1	25.4	0.0	0.016
Trust Region-Precise	2.20e-1	5.66e-3	2.08e-1	2.30e-1	34.4	0.0	0.022
Trust Region-Conservative	2.19e-1	2.52e-3	2.14e-1	2.24e-1	157.6	0.0	0.098
GD-Nesterov	2.27e-1	3.63e-3	2.19e-1	2.34e-1	21.8	0.0	0.029
GD-Momentum	2.35e-1	6.16e-3	2.26e-1	2.47e-1	21.2	0.0	0.028
GD-AdaptiveMomentum	2.59e-1	1.32e-2	2.33e-1	2.85e-1	15.8	0.0	0.020