Table 1: Performance Results for StyblinskiTang_10$DProblem$

Optimizer	Mean Final Value	Std Dev	Best Value	Worst Value	Mean Func Evals	Success Rate (%)	Mean Time (s)
GD-Nesterov	-3.81×10^{2}	1.16×10^{1}	-3.92×10^{2}	-3.49×10^{2}	74.8	50.0	0.002
GD	-3.77×10^{2}	1.41×10^{1}	-3.92×10^{2}	-3.49×10^{2}	144.1	37.5	0.004
L-BFGS	-3.74×10^{2}	1.19×10^{1}	-3.92×10^{2}	-3.49×10^{2}	212.8	35.0	0.003
QQN-StrongWolfe	-3.71×10^{2}	1.89×10^{1}	-3.92×10^{2}	-3.35×10^{2}	290.7	35.0	0.008
QQN-MoreThuente	-3.49×10^{2}	6.16×10^{1}	-3.92×10^{2}	-1.51×10^{2}	308.8	35.0	0.008
GD-WeightDecay	-3.75×10^{2}	1.57×10^{1}	-3.92×10^{2}	-3.35×10^{2}	95.7	30.0	0.003
Adam-Fast	-3.62×10^{2}	1.27×10^{1}	-3.76×10^{2}	-3.23×10^{2}	72.7	30.0	0.001
GD-Momentum	-3.57×10^{2}	3.43×10^{1}	-3.92×10^{2}	-2.59×10^{2}	73.2	25.0	0.002
QQN-Bisection-2	-3.76×10^{2}	1.09×10^{1}	-3.92×10^{2}	-3.49×10^{2}	259.8	20.0	0.005
QQN-GoldenSection	-3.76×10^{2}	1.38×10^{1}	-3.92×10^{2}	-3.49×10^{2}	575.8	20.0	0.010
QQN-Backtracking	-3.63×10^{2}	1.92×10^{1}	-3.92×10^{2}	-3.35×10^{2}	160.2	20.0	0.004
QQN-Bisection-1	-3.73×10^{2}	1.87×10^{1}	-3.92×10^{2}	-2.93×10^{2}	355.6	17.5	0.007
QQN-CubicQuadraticInterpolation	-3.63×10^{2}	2.15×10^{1}	-3.92×10^{2}	-3.07×10^{2}	348.7	15.0	0.012
L-BFGS-Conservative	-3.78×10^{2}	1.30×10^{1}	-3.92×10^{2}	-3.49×10^{2}	557.9	5.0	0.014
Trust Region-Standard	-2.01×10^{2}	7.74×10^{-1}	-2.02×10^{2}	-1.99×10^{2}	602.0	0.0	0.004
L-BFGS-Aggressive	-1.71×10^{2}	6.04×10^{1}	-2.81×10^{2}	-1.06×10^{1}	775.9	0.0	0.007
Adam-WeightDecay	-6.94×10^{1}	3.46	-7.48×10^{1}	-6.07×10^{1}	502.0	0.0	0.011
Trust Region-Adaptive	-5.10×10^{1}	9.65×10^{-1}	-5.28×10^{1}	-4.93×10^{1}	602.0	0.0	0.004
Adam-AMSGrad	-1.34×10^{1}	2.09	-1.67×10^{1}	-9.13	502.0	0.0	0.012
Adam	-1.23×10^{1}	2.44	-1.69×10^{1}	-7.00	502.0	0.0	0.011
Trust Region-Conservative	-2.80	8.32×10^{-1}	-4.77	-1.02	602.0	0.0	0.004