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[" New Quasi-Newton Methods for Training Deep Learning Models."](#)

Abstract:

We present two sampled quasi-Newton methods for deep learning: sampled LBFGS (S-LBFGS) and sampled LSR1 (S-LSR1). Our proposed algorithms are efficient in terms of accessed data points (epochs) and have enough concurrency to take advantage of parallel/distributed computing environments. Numerical tests on a toy classification problem as well as on real datasets will be presented.