A TEMPLATE FOR THE *arxiv* STYLE

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ABSTRACT

Empirical Risk Minimization problem is a common problem in machine learning methods. In the article we analyze Newton-type methods of Empirical Risk Minimization problem for some Machine Learning model using Newton-type method accessing one data point per iteration. Specifically, by applying existing sampling strategies we plan to improve stochastic second-order method presented in the paper Stochastic Newton and Cubic Newton Methods with Simple Local Linear-Quadratic Rates. We focus on sampling strategies from Parallel coordinate descent methods for big data optimization.