

Convergence Analysis

Theorem 1

Assume that the losses f_k are $(1/\mu)$ -smooth. Then, under Assumptions 1 and 2, there exists a constant $s \in [0, 1]$ such that for any given convergence target ε_D , choosing H such that

$$H \geq \frac{1}{(1 - \bar{\Theta})s} \log \frac{n}{\varepsilon_D}$$

will satisfy $\mathbb{E}[D(\alpha^{(H)}) - D(\alpha^\star)] \leq \varepsilon_D$. Here, $\bar{\Theta} := p_{\max} + (1 - p_{\max})\Theta_{\max} < 1$.

Experimental Results