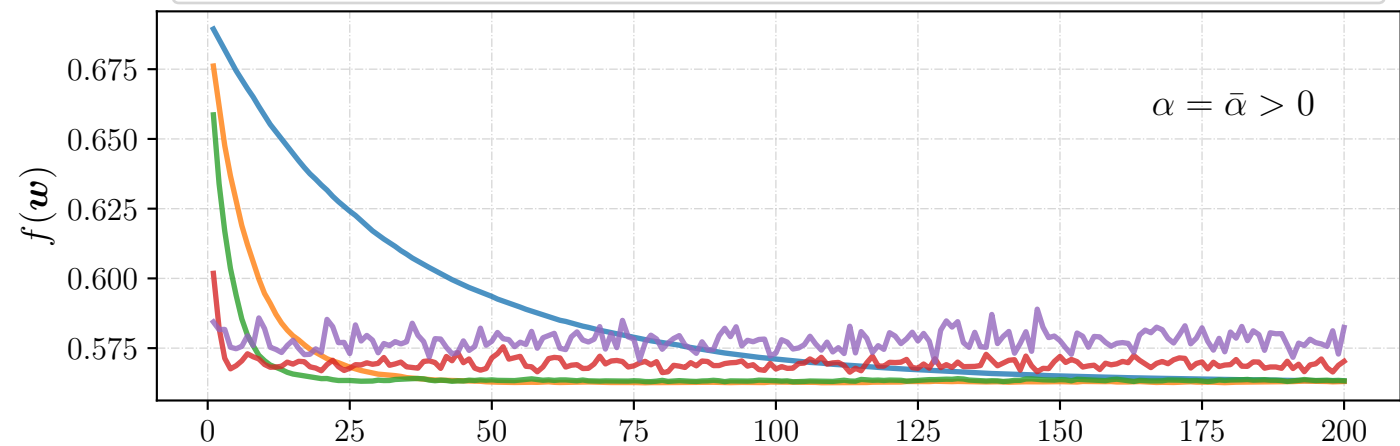
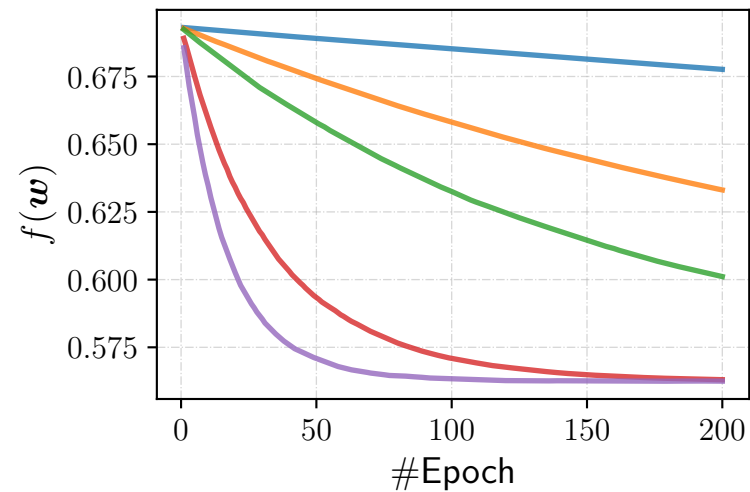


Subsampling Newton with $\theta = 0.5$, $c = 0.0001$, $\mathcal{S}_k = \mathcal{S}_k^H = 128$

$\bar{\alpha} = 0.01$ $\bar{\alpha} = 0.05$ $\bar{\alpha} = 0.1$ $\bar{\alpha} = 0.5$ $\bar{\alpha} = 1$



$$L = \frac{\|\mathbf{X}^T \mathbf{X}\|}{n} + \lambda, \quad \alpha = \frac{\bar{\alpha}}{L}$$



$$L_{\mathcal{S}_k} = \frac{4 \left\| \sum_{i \in \mathcal{S}_k} \mathbf{x}_i \mathbf{x}_i^T \right\|}{|\mathcal{S}_k|} + \lambda, \quad \alpha = \frac{\bar{\alpha}}{L_{\mathcal{S}_k}}$$

