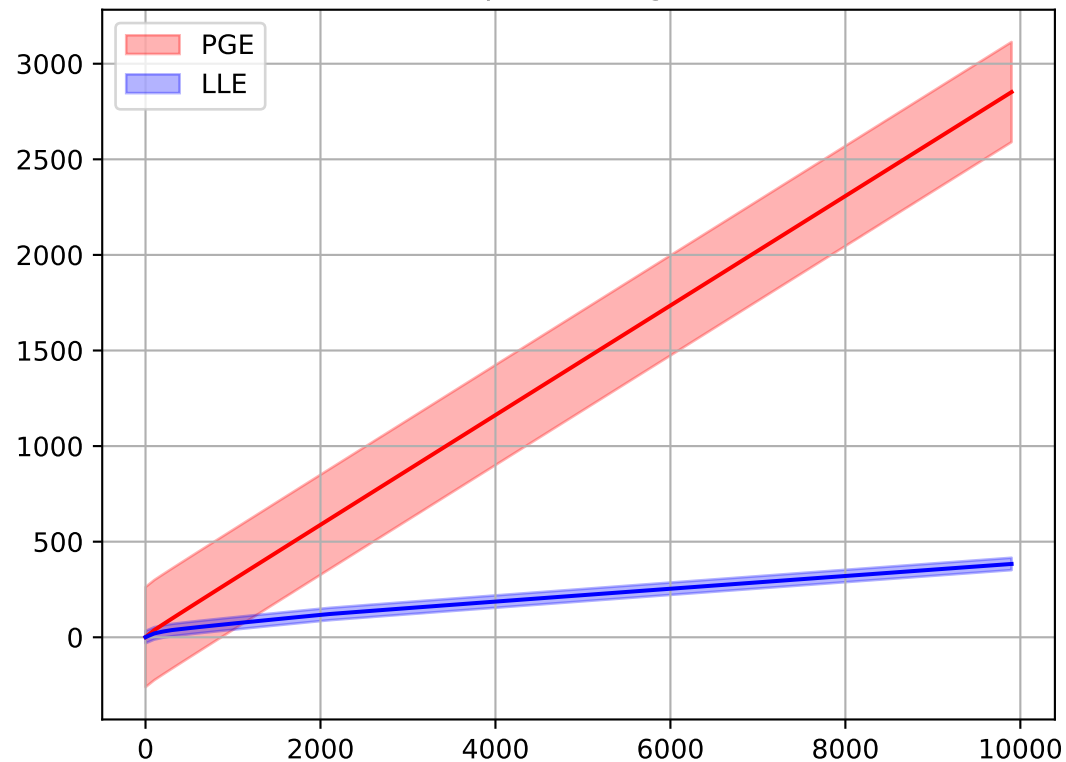
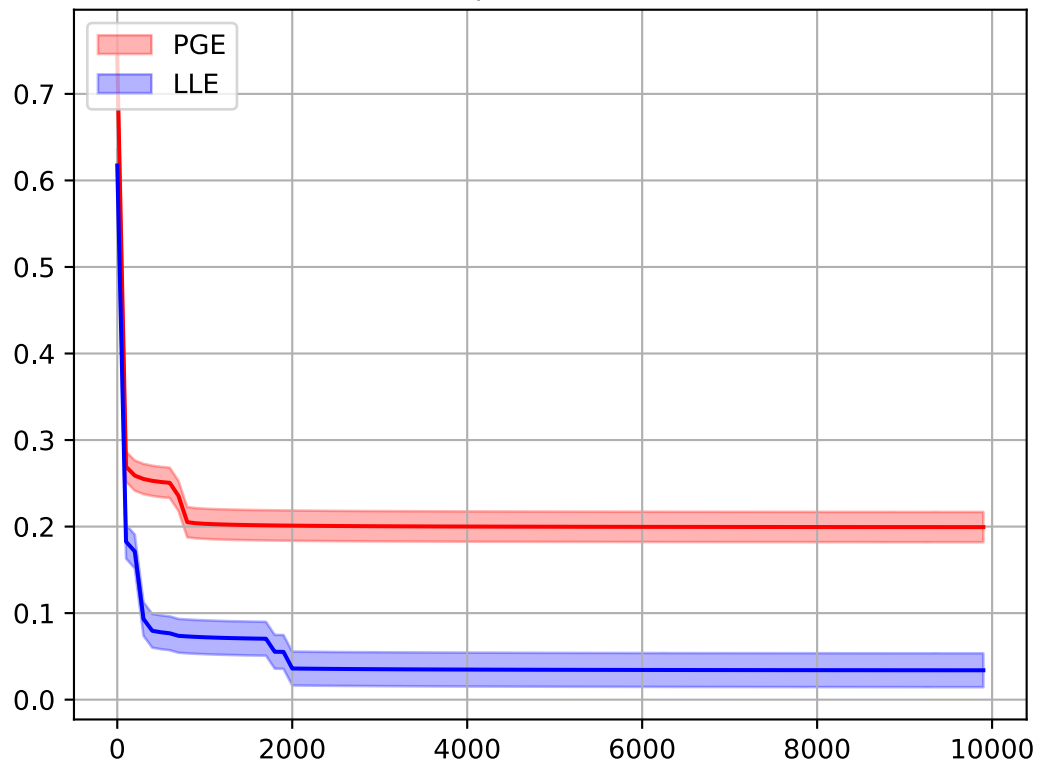


Expected Regret



$$\sum_{t=0}^{T-1} \left(\pi^{*\top} \mathbf{r} - \mathbb{E}[r(A_t)] \right)$$

Expected Loss



$$\pi^{*\top} \mathbf{r} - \mathbb{E}[r(A_t)]$$