

Algorithms and Uncertainty

Winter Term 2025/26

Tutorial Session - Week 12

Exercise 1:

In the lecture, we used that $\mathbf{E} \left[\min_i \sum_{t=1}^T \ell_i^{(t)} \right] \leq \min_i \mathbf{E} \left[\sum_{t=1}^T \ell_i^{(t)} \right]$ or $\mathbf{E} \left[\max_i \sum_{t=1}^T r_i^{(t)} \right] \geq \max_i \mathbf{E} \left[\sum_{t=1}^T r_i^{(t)} \right]$ respectively. Give a proof of those inequalities.