

2023-04-26

Given a solution \hat{x} satisfying the penalty problem

$$\text{minimize } \frac{1}{2}x^T Hx - x^T d + \frac{1}{2\mu} \|A^T x - b\|^2,$$

find approximate Lagrange multipliers for the Lagrangian formulation

$$\mathcal{L}(x, \lambda) = \frac{1}{2}x^T Hx - x^T d + \lambda^T (A^T x - b).$$