

Reformulated Optimization Problem

- optimization problem:

$$\min_{\mathbf{d} \in \mathcal{P}} \text{RE}(\mathbf{d} \parallel \mathbf{1})$$

- where

$$\mathcal{P} = \left\{ \mathbf{d} : \sum_i d(i) y_i g_j(x_i) = 0 \quad \forall j \right\}$$

- note: feasible set \mathcal{P} never empty (since $\mathbf{0} \in \mathcal{P}$)