$$\begin{aligned} \min \quad & \frac{\sum_i x_i p_i}{\sum_i \sum_{j \neq j} x_i x_j d_{ij}} \\ s.t \quad & 0 \leq x_i \leq 1 \qquad \forall i \end{aligned}$$

We can chaget it to the following equivalent convex program:

$$\begin{aligned} \min \quad & \alpha \\ s.t \quad & \sum_i \sum_{j \neq j} x_i x_j d_{ij} \leq \alpha \sum_i x_i p_i \\ & 0 \leq x_i \leq 1 \qquad \forall i \end{aligned} .$$