examples $(\mathbf{x}_i, y_i)$

distance $(D(\mathbf{x}_i, \mathbf{x_j})) = (\mathbf{x}_i - \mathbf{x_j})^T \mathcal{M} (\mathbf{x}_i - \mathbf{x_j})$

similarity $y_{il} = \begin{cases} 1 & y_i,\ y_l \text{ same} \\ 0 & \text{otherwise} \end{cases}$

target neighbours $\eta_{ij} = \begin{cases} 1 & \mathbf{x}_i,\ \mathbf{x}_j \text{ should be close} \\ 0 & \text{otherwise} \end{cases}$