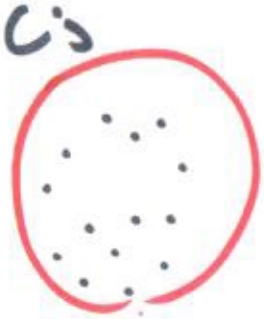
Silhouette Coefficient



$$a(i) = \frac{1}{|C_i|-1} \sum_{\substack{j \in C_i \\ j \neq i}} d(i,j)$$

$$b(i) = \min_{j \neq i} \frac{1}{|C_j|} \sum_{j \in C_j} d(i,j)$$

$$s(i) = \begin{cases} 1 - \dfrac{a(i)}{b(i)} & \text{if } a(i) < b(i) \\ 0 & \text{if } a(i) = b(i) \\ \dfrac{b(i)}{a(i)} - 1 & \text{if } b(i) < a(i) \end{cases}$$