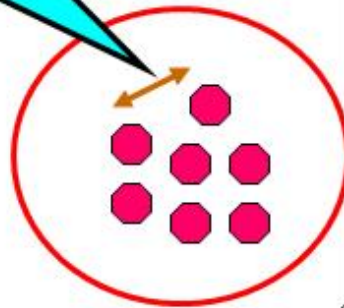


# Métodos Matriciais e Análise de Clusters

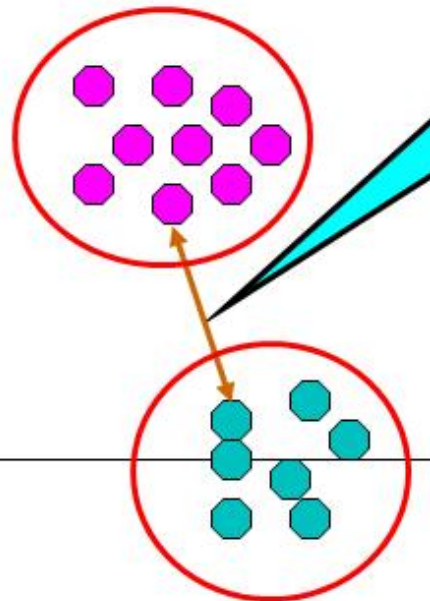
Avaliação de Clusters

# Como escolher o melhor resultado?

Intra-cluster distances are minimized



Inter-cluster distances are maximized



# Como escolher o melhor resultado?

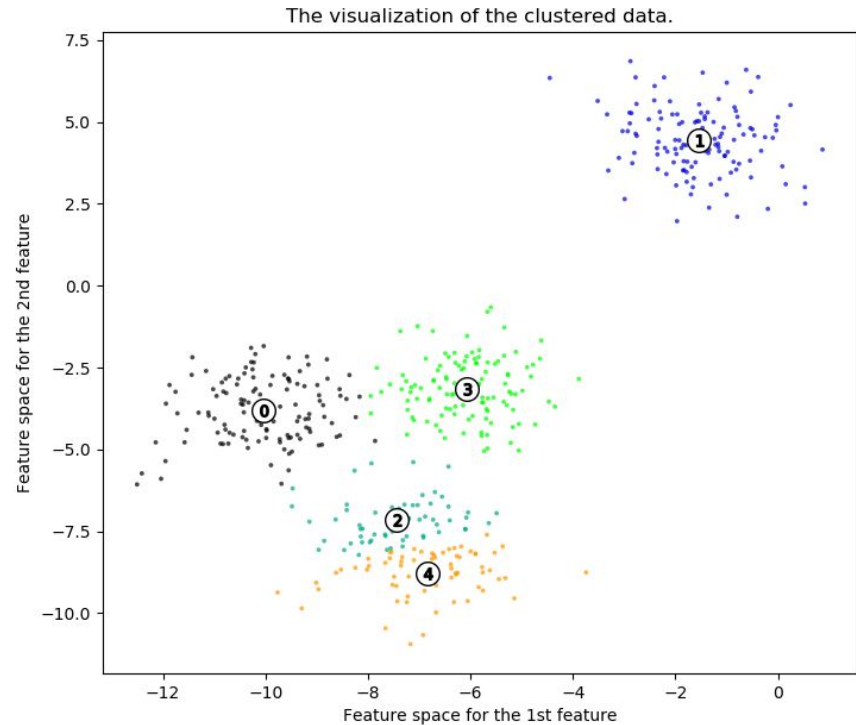
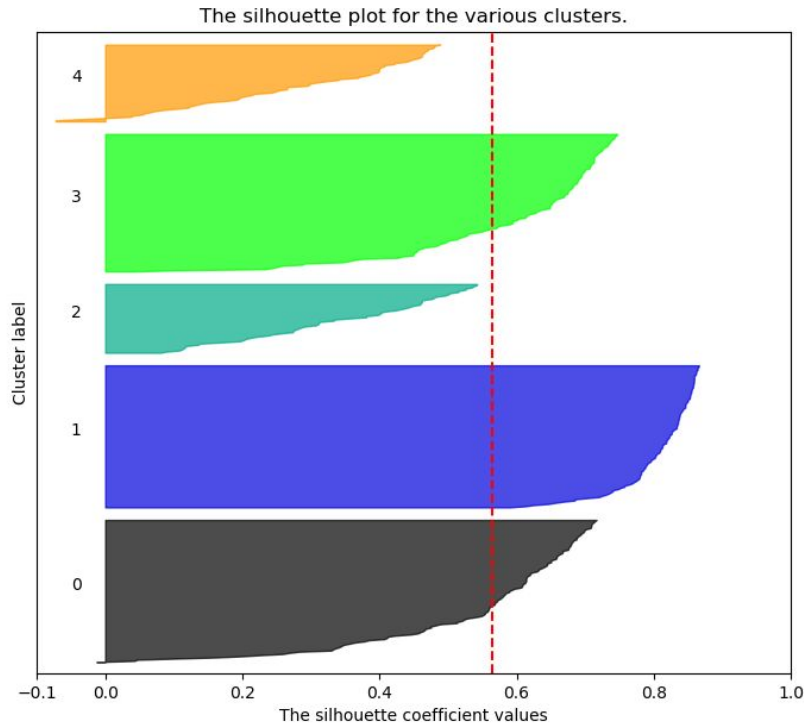
Intra-cluster distances are minimized

Inter-cluster distances are maximized

Índice Davies-Bouldin

$$DB = \sum \frac{d_{intra}}{d_{inter}}$$

## Silhouette analysis for KMeans clustering on sample data with $n\_clusters = 5$



$$s(i) = \frac{b(i) - a(i)}{\max(a(i), b(i))}$$

# Voltando para o supervisionado...

