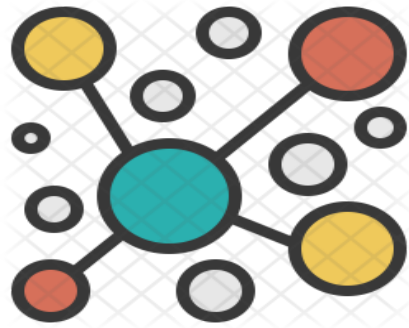


**Data Mining**  
**Lab sheet N°7: Clustering**  
**ENSIA 2023-2024**



### Resources

#### **Clustering**

- Clustering algorithms: [API Reference — scikit-learn 1.3.2 documentation](#)
- Distance metrics: [scipy.spatial.distance.cdist](#)

#### **Hierarchical clustering**

- Scipy: [Hierarchical clustering \(scipy.cluster.hierarchy\) — SciPy v1.11.4 Manual](#)
- Dendrogram: [scipy.cluster.hierarchy.dendrogram](#)
- Agglomerative clustering: [sklearn.cluster.AgglomerativeClustering — scikit-learn 1.3.2 documentation](#)

#### **DBSCAN clustering**

- ScikitLearn: [sklearn.cluster.DBSCAN — scikit-learn 1.3.2 documentation](#)

#### **Clustering - Evaluation metrics**

- Clustering metrics: [2.3. Clustering — scikit-learn 1.3.2 documentation](#)
- Silhouette Score: [sklearn.metrics.silhouette\\_score — scikit-learn 1.3.2 documentation](#)
- Homogeneity score: [sklearn.metrics.homogeneity\\_score](#)