

Lab Clustering n°2

Lets compare algorithms

Generating data

1. Generate a dataset using the **make_circles** function from the **sklearn.datasets** module.
2. Visualize the dataset shape using scatter.
3. Normalize the dataset.

Clustering

1. Use the following algorithms to cluster the dataset using the correspondent parameters:
 - a. Mini Batch Kmeans (number of clusters 2)
 - b. Mean Shift (number of clusters 2)
 - c. Spectral Clustering (number of clusters 2 & affinity : nearest neighbor)
 - d. Gaussian clustering (number of clusters 2)

The **sklearn.cluster** and **sklearn.mixture** have these clustering algorithm already implemented.

2. Visualize each result.

Different data shapes

1. Repeat all these steps by changing the dataset shape to the following ones:
 - a. Noisy moons
 - b. Blobs