

Clustering algorithms implemented in other packages

1 PYCLUSTERING

1.1 Hierarchical algorithms

- Agglomerative - https://pyclustering.github.io/docs/0.10.1/html/d4/d81/classpyclustering_1_1cluster_1_1agglomerative_1_1agglomerative.html
- BIRCH - https://pyclustering.github.io/docs/0.10.1/html/d6/d00/classpyclustering_1_1cluster_1_1birch_1_1birch.html
- CURE - https://pyclustering.github.io/docs/0.10.1/html/dc/d6d/classpyclustering_1_1cluster_1_1cure_1_1cure.html

1.2 Grid based algorithms

- BANG - https://pyclustering.github.io/docs/0.10.1/html/da/db0/classpyclustering_1_1cluster_1_1bang_1_1bang.html
- CLIQUE (grid based and density based at the same time) - https://pyclustering.github.io/docs/0.10.1/html/d2/d4f/classpyclustering_1_1cluster_1_1clique_1_1clique.html

1.3 Sequential algorithms

- BSAS - https://pyclustering.github.io/docs/0.10.1/html/db/d8b/classpyclustering_1_1cluster_1_1bsas_1_1bsas.html
- MBSAS - https://pyclustering.github.io/docs/0.10.1/html/da/da9/classpyclustering_1_1cluster_1_1mbsas_1_1mbsas.html
- TSSAS - https://pyclustering.github.io/docs/0.10.1/html/df/db9/classpyclustering_1_1cluster_1_1ttsas_1_1ttsas.html

1.4 Partitional algorithms

- CLARANS - https://pyclustering.github.io/docs/0.10.1/html/d6/d42/classpyclustering_1_1cluster_1_1clarans_1_1clarans.html
- K means - https://pyclustering.github.io/docs/0.10.1/html/da/d22/classpyclustering_1_1cluster_1_1kmeans_1_1kmeans.html
- K means++ - https://pyclustering.github.io/docs/0.10.1/html/db/de0/classpyclustering_1_1cluster_1_1center__initializer_1_1kmeans__plusplus__initializer.html
- K medians - https://pyclustering.github.io/docs/0.10.1/html/df/d68/classpyclustering_1_1cluster_1_1kmedians_1_1kmedians.html
- K medoids (PAM) - https://pyclustering.github.io/docs/0.10.1/html/d0/dd3/classpyclustering_1_1cluster_1_1kmedoids_1_1kmedoids.html
- G means - https://pyclustering.github.io/docs/0.10.1/html/d8/d3c/classpyclustering_1_1cluster_1_1gmeans_1_1gmeans.html
- X means - https://pyclustering.github.io/docs/0.10.1/html/dd/db4/classpyclustering_1_1cluster_1_1xmeans_1_1xmeans.html

1.5 Density based algorithms

- DBSCAN - https://pyclustering.github.io/docs/0.10.1/html/d2/d42/classpyclustering_1_1cluster_1_1dbscan_1_1dbscan.html
- OPTICS - https://pyclustering.github.io/docs/0.10.1/html/de/d3b/classpyclustering_1_1cluster_1_1optics_1_1optics.html

- ROCK - https://pyclustering.github.io/docs/0.10.1/html/d8/dde/classpyclustering_1_1cluster_1_1rock_1_1rock.html

1.6 Probabilistic algorithms

- Gaussian Mixture Models - https://pyclustering.github.io/docs/0.10.1/html/d7/d7e/classpyclustering_1_1cluster_1_1ema_1_1ema.html

1.7 Soft clustering algorithms

- Fuzzy C-means - https://pyclustering.github.io/docs/0.10.1/html/d2/d6a/classpyclustering_1_1cluster_1_1fcm_1_1fcm.html

1.8 Other

- Genetic algorithm - https://pyclustering.github.io/docs/0.10.1/html/d5/d4d/classpyclustering_1_1cluster_1_1ga_1_1genetic__algorithm.html
- SOM-SC - https://pyclustering.github.io/docs/0.10.1/html/d3/d44/classpyclustering_1_1cluster_1_1somsc_1_1somsc.html
- HSyncNet - https://pyclustering.github.io/docs/0.10.1/html/d5/d0a/classpyclustering_1_1cluster_1_1hsyncnet_1_1hsyncnet.html
- SyncNet - https://pyclustering.github.io/docs/0.10.1/html/d4/d98/classpyclustering_1_1cluster_1_1syncnet_1_1syncnet.html
- SyncSOM - https://pyclustering.github.io/docs/0.10.1/html/d8/d46/classpyclustering_1_1cluster_1_1syncsom_1_1syncsom.html

2 SCI-KIT LEARN

2.1 Exemplar based algorithms

- Affinity propagation - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.AffinityPropagation.html#sklearn.cluster.AffinityPropagation>

2.2 Hierarchical algorithms

- Agglomerative - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.AgglomerativeClustering.html#sklearn.cluster.AgglomerativeClustering>
- BIRCH - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.Birch.html#sklearn.cluster.Birch>
- Feature agglomeration - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.FeatureAgglomeration.html#sklearn.cluster.FeatureAgglomeration>

2.3 Partitional algorithms

- K means - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.KMeans.html#sklearn.cluster.KMeans>
- Bisecting K means - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.BisectingKMeans.html#sklearn.cluster.BisectingKMeans>
- Mini batch K means - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.MiniBatchKMeans.html#sklearn.cluster.MiniBatchKMeans>

2.4 Density based algorithms

- DBSCAN - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.DBSCAN.html#sklearn.cluster.DBSCAN>

- Mean-shift - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.MeanShift.html#sklearn.cluster.MeanShift>
- OPTICS - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.OPTICS.html#sklearn.cluster.OPTICS>

2.5 Spectral algorithms

- Spectral Clustering - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.SpectralClustering.html#sklearn.cluster.SpectralClustering>
- Spectral Biclustering - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.SpectralBiclustering.html#sklearn.cluster.SpectralBiclustering>
- Spectral Coclustering - <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.SpectralCoclustering.html#sklearn.cluster.SpectralCoclustering>

3 SCIPY

3.1 Partitional algorithms

- K means (with different initialisations) - <https://docs.scipy.org/doc/scipy/reference/cluster.vq.html#module-scipy.cluster.vq>

3.2 Hierarchical algorithms

- Agglomerative - <https://docs.scipy.org/doc/scipy/reference/cluster.hierarchy.html#module-scipy.cluster.hierarchy>

4 ONEAPI

List of supported algorithms: <https://intel.github.io/scikit-learn-intelx/algorithms.html>

4.1 Partitional algorithms

- K means - <https://oneapi-src.github.io/oneDAL/onedal/algorithms/clustering/kmeans.html>
- K means with initialisation - <https://oneapi-src.github.io/oneDAL/onedal/algorithms/clustering/kmeans-init.html>

4.2 Density based algorithms

- DBSCAN - <https://oneapi-src.github.io/oneDAL/onedal/algorithms/clustering/dbscan.html>

5 INTERESTING ALGORITHMS NOT MENTIONED ABOVE

- HDBSCAN - <https://pypi.org/project/hdbscan/>
- CLASSIX - <https://github.com/nla-group/classix>