

Cluster Validity Indices

Centroid-based indices:

Calinski-Harabasz index (ch), Davies-Bouldin index (db), Enhanced Davies-Bouldin index (db2), Xie-Beni index (xb), Dunn index variant 33 (gd33), Dunn index variant 41 (gd41), Dunn index variant 43 (gd43), Dunn index variant 51 (gd51), Dunn index variant 53 (gd53), S_Dbw validity index (sdbw), CS index (cs), Score Function index (sf), PBM index (pbm), Symmetry index (sym), Davies-Bouldin index based on symmetry (sdb), Dunn index based on symmetry (sdi), COP index (cop), SV index (sv), WB index (wb), Density-based index (dbcv), Index based on local cores (lccv), SSDD index(ssdd).

Position-based indices:

Silhouette index (sil), Dunn index (dunn), Dunn index variant 31 (gd31), C-index (cind), CVNN index (cvnn), CVDD index (cvdd).

Proximity Measures

Euclidean distance (eucdist), Normalized Euclidean distance (neucdist), Cosine similarity (cosdist), Pearson's correlation coefficient (pcorr), Spearman's correlation coefficient (scorr), Laplacian distance (lapdist), Symilarity-based distance (symdist), Maxium Edge distance (medist).

Clustering Performance Indices

Based on information theory:

Mutual information (mi), Variation of mutual information (vi), Normalized mutual information (nmi).

Based on pairwise similarity:

Rand index (ri), Adjusted rand index (ari),Wallace coefficient (wab), Jaccard index (jrd), Fowlkes-Mallows index (fm), Larsen index (lab), Meila-Heckerman index (mh), Mirkin coefficient (mc).

Clustering Algorithms

kmedoids, acde, tgca, depso, gaborsegment.