|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Fuzzy | PCM | SOFM | BayesainGMM | GMM |
| Silhouette Score | 0.81376 | 0.787656 | 0.8858423 | 0.8918810 | 0.887124 |
| Beta CV | 0.118975 | 0.141247 | 0.0983283 | 0.0118623 | 0.0125825 |
| Normalized cut | 0.547456 | 0.53312 | 0.49923798 | 0.935774 | 0.934274 |
| Dunn Index | 0.0001876 | 0.00018765 | 0.001934498 | 0.000524768 | 0.0003761 |
| Davies-Bouldin Index | 0.77378 | 0.82229 | 0.3989191 | 0.59779 | 0.60807468 |

* Silhouette Score: Silhouette Coefficient combine ideas of both cohesion and separation, but for individual points, as well as clusters and clustering. The closer to 1, the better the clustering.
* Beta CV: The Beta-CV measure is the ratio of the mean intra-cluster distance to the mean inter-cluster distance. The smaller the Beta-CV ratio, the better the clustering.
* Normalized cut: The normalized cut objective for graph clustering can also be used as an internal clustering evaluation measure. The higher the normalized cut value the better.
* Dunn Index: The Dunn index is defined as the ratio between the minimum distance between point pairs from different clusters and the maximum distance between point pairs from the same cluster. The larger the Dunn index the better the clustering because it means even the closest distance between points in different clusters is much larger than the farthest distance between points in the same cluster.
* Davies-Bouldin Index: DBij measures how compact the clusters are compared to the distance between the cluster means. The smaller the DB value the better the clustering