Guided Projects Artificial Intelligence & Machine Learning

Guided Projects: Unsupervised Learning

Spherical K-Means: Pattern Discovery in Textures

Question:

Generate a dummy dataset using Scikit-Learn having high dimensionality (number of features >10) and total 4 classes. For this dataset, first implement K-Means clustering and then use the clusters for classification purpose. Now using the same dataset, implement spherical clustering and then check accuracy for classification. Notice the change in accuracy. You may also plot the obtained clusters from both the methods using t-SNE plots or by projecting data into two dimensions using PCA.