FINGERTIPS

Python ML Clustering Project

Cardiac Arrest Analysis

Project Description:

In this particular project, we are using a dataset that contains information like quality Gender, Chain_smoker, Consumes_other_tobacco_products, HighBP, Obese, Diabetes, Metabolic_syndrome

However, before you go ahead and make clustering, it is advised that you first pre-process the data, since it may contain some irregularities and noise.

In addition, try various tricks and techniques in order to gain the best accuracy in your predictions.

Part-1: Data Exploration and Pre-processing

1. Load dataset
2. Check null values
3. Print information about dataset
4. Describe dataset in statistic form
5. Drop under risk column

Part-2: Working with Models

1. Apply Kmean clustering on dataset
2. Print cluster centers
3. Create column cluster for predicted labels value
4. Plot the hierarchical clustering using scipy
5. Apply Agglomerative Clustering using number of clusters
6. Create label column for predicted cluster label
7. Show label counts.
8. Show a silhouette score