Experiment No. 9

Title : Apply the appropriate Binarization methods on given dataset.

Theory : Sklearn.Binarizer() in Python

Sklearn.preprocessing.Binarizer() is a method which belongs to preprocessing module. It plays a key role in discretization of continuous feature values.

Example 1 :-

A continuous data of pixels values of an 8-bit grayscale image have values ranging between 0 (black) and 255 (white) and one needs it to be black and white, he using Binarizer() one can set a threshold converting pixel values from 0-127 to 0 and 128-255 as 1.

Example :-

One has a machine record having "success percentage" as a feature. These values are continous ranging from 10% to 99% but a researcher simply wants to use this data for predictions of pass or fail status for machine based on another or other given parameters

Syntax :

sklearn.preprocessing.Binarizer(threshold, copy)

parameters :

i) Threshold : values less than or equal to threshold is mapped 0, else to 1. By default threshold value is 0.0. [float, optional]

ii) copy : [boolean, optional] If set to false, it avoids in copy. By default it is true.

Return : Binarized feature values

conclusion :

In this experiment we have learned about how to apply appropriate binarization method on given dataset.