Overview of Support Vector Machines Example

Dataset Link:

<https://www.kaggle.com/ritesaluja/bank-note-authentication-uci-data>

Dataset Content:

This dataset contains five columns. Data were extracted from images that were taken from genuine and forged banknote-like specimens. Wavelet Transform tools were used to extract features from images. The first four columns contain information about these features (variance skewness, curtosis, entropy) and the last one (class) contains values of 0 and 1 (authentic or forged banknote).

Problem:

We would like to classify if a banknote is authentic or not based on the features provided from the Wavelet Transform Tools.

Solution:

We want to develop a classification model using Support Vector Machines which allows us to classify with accuracy if a banknote is genuine or forged.

Variables:

Independent variable 🡪 Variance, skewness, curtosis, entropy.

Dependent variable 🡪 Authentic banknote or not (class 0, 1)