Proposal For

Fake Currency Detection

Problem:

Fake Currency Detection is a real problem for both individuals and businesses. Counterfeiters are constantly finding new methods and techniques to produce counterfeit banknotes, which are essentially indistinguishable from real money. At least for the human eye.

Target:

The target value is simply 0 for real banknotes and 1 for fake banknotes.

Data Description:

The Banknote Authentication data was extracted from images that were taken from genuine and forged banknote-like specimens. For digitization, an industrial camera usually used for print inspection was used. The final images have 400x 400 pixels. Due to the object lens and distance to the investigated object gray-scale pictures with a resolution of about 660 dpi were gained. Wavelet Transform tool were used to extract features from images. The dataset contains the following attributes:

- 1. variance of Wavelet Transformed image (continuous)
- 2. skewness of Wavelet Transformed image (continuous)
- 3. curtosis of Wavelet Transformed image (continuous)
- 4. entropy of image (continuous)

Tools:

Pandas

Numpy, matplotlib.pyplot

sklearn.model_selection, sklearn.preprocessing, sklearn.linear_model sklearn.metrics.