

Banknote Authentication

This data set was pulled from [UCI](#). It was collected by photos of genuine and forged banknotes. A Wavelet Transform tool was then used on the images to get the following attributes for each sample:

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)
5. class (integer)

This dataset contains 1,372 instances and is good for classification. Note that the inputs are not very intuitive, so an explanation should be provided. A KNN model with $k = 5$ with variance and entropy has ~88% accuracy.

You can use the following code to load the data into google colab:

```
import pandas as pd
url = "https://raw.githubusercontent.com/the-codingschool/TRAIN/main/banknote/banknote.csv"
df = pd.read_csv(url)
```