Abstract

Monetary transactions are integral part of our day to day activities, so currency authentication has become one of the active research area at present and it has vast potential applications. In this paper we introduced a system to verify the authentication of banknotes bench mark dataset using computer vision. We considered 1372 samples of various bank notes in our work. The technology of currency authentication aims to search and extract potential features of paper currency for efficient classification. Features were extracted from images that were taken from genuine and forged banknote-like specimens. They are classified using Artificial Neural network. The variance of Wavelet Transformed image (continuous), skewness of Wavelet Transformed image (continuous), curtosis of Wavelet Transformed image (continuous), entropy of image (continuous) features are extracted from images for accurate classification. Our proposed system able to authenticate with zero percent misclassification.

**Index Terms**

Computer Science

Networks

**Keywords**

Currency recognition, Artificial Neural Network, Classification, wavelets