Abstract

Biometrics verification has become a recent trend to prevent unauthorized accesses to all kinds of e-data. Signature is strongly accepted in legally and socially as identification and authentication of a person’s identity. But, it is very difficult to verify the signature physically. So, it is needed to design a system that verifies the signature of a human automatically. A set of actual signatures is collected from individuals whose signatures have to be authenticated by the system. The topological and texture features are extracted from the actual signature set. The system is trained by using these features. The mean feature values of all the actual signature features are calculated. This mean features acts as the model for verification against a test signature. Euclidian distance between template signature features and claimed signature features serves as a measure of similarity between the two. If this distance is greater than a predefined threshold, then the test signature is detected as fake. The system provides the result to classify actual and forgery signature with accuracy up to 100%.

References


Index Terms

Computer Science

Pattern Recognition

Keywords

Authentication, Biometric identification, Euclidian distance, Feature extraction, Signature verification.