This paper mainly focused on the evaluation of an authentication system based on personal signatures. Signature verification is an important research topic in the area of biometric authentication. In this paper the work is done in such a way that the signatures are captured using WEBCAM. A visual-based online signature verification system in which the signer’s pen tip is tracked. The data acquisition of the system consists of only low-cost cameras (webcams) and does not need special equipment such as an electronic tablet. Online signature data is obtained from the images captured by the webcams by tracking the pen tip. The pen tip tracking is implemented by the Sequential Monte Carlo method in real time. Then the distance between the input signature data and reference signature data enrolled in advance is computed using Dynamic Time Warping (DTW). Finally, the input signature is classified as genuine or a forgery by comparing the distance with a threshold.

Index Terms

Computer Science  Security

Keywords

Biometric Signature Identification Security Verification