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SMART BIO-METRIC AUTHENTICATION INSTRUMENT USING HANDWRITTEN TEXT AND SIGNATURE VERIFICATION

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ABSTRACT

Handwritten text and Signature Recognition (Online and Offline)is potentially the most powerful and acceptable means of personal authentication in Human Computer Interaction, with applications to be found in intelligent e-governance application, cheque authentication, document image analysis, access control and many other areas. Handwriting is a complex perceptual motor task generating linguistic information. Characters reflect shape distinction needed to perceive different phonetic information of words. On the other hand, human signature reflects important behavioral characteristics and is widely used as a behavioral biometric.In this paper, Bangla Online Handwriting Recognition System and Online Signature Verification system developed at CDAC Kolkata are described as two computational models in the areas of Pattern Recognition and Human Computer Interaction. First, Bangla Handwriting Recognition system is discussed as a case to role a prescription in“Local Language Interfaces” forsecurity application for urban and rural people. Similarly Online Signature Verification System is presented here as an instrument to be used in human authentication, access control, restricted domain banking applications and other security related applications.

Keywords: Pattern Recognition, Handwriting Recognition, Bangla OHR, Signature Verification, Online prescription.

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