DEVANAGARI CHARACTER RECOGNITION USING NEURAL APPROACH

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Abstract

Online handwriting recognition is gaining renewed interest owing to the increase of pen computing applications and new pen input devices. The recognition of Devanagari characters is different from Latin script handwriting recognition and poses a special challenge. The objective of this work is to develop a system which can recognize a handwritten Devanagari character. The character is written with the help of stylus & for recognition unsupervised learning using self organizing maps is used. In this, the input character is first converted into a binary 5x7 matrix. The performance of the system is analysed using recognition rate. In the development of entire system multiple classifiers approach is used. In this document Neural classifier approach is discussed which provides best converging classifier and a fast one so that the system can be very easily adaptable in Mobile platforms such as Android, Google Mobile and Windows Mobile which encourages the development of various ubiquitous computing applications in the users own language.