Abstract

This paper presents a system to recognize online handwritten Gurmukhi and Devanagiri characters in touch screen based mobile phones. We have used small line segments (derived from elastic matching and chain code techniques) to recognize Gurmukhi and Devanagiri characters. Mobile phones offer main challenges as: less memory and slow processor speed in comparison to Desktop or notebooks or Tablet PCs. We have proposed a system to work effectively in mobile phones in view to see memory and processor limitations. In Gurmukhi, we have achieved an overall recognition rate as 94.69% for a training set of 5330 characters and test set include 1640 characters; the recognition rate for Devanagiri characters for training set of 1050 characters and test set of 504 characters is 86.90%.

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**Index Terms**

Computer Science  
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**Keywords**

Online Handwriting Recognition  
Preprocessing  
Elastic Matching  
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