Chapter: 6

Conclusion and Future Work

Conclusion

Future Development with Ongoing Research

Conclusion

A novel effort by combining two feature extraction techniques (HOG and Gabor filter) is presented in this paper. The fusion of feature vectors has brought out a benchmark recognition result (96.1%) where individual feature extraction method gives comparatively lower accuracy (90.5% for HOG, 91.2% for Gabor filter). The accomplishments of character segmentation and feature extraction mostly contribute to the accuracy of an OCR system. The improvement of these phases may ensure greater accuracy. Hopefully, in future, the work will be extended consolidating compound characters and modifiers of Bangla script.

Future Development with Ongoing Research

In our proposed system we mostly discussed on the feature extraction technique as it plays the most important role in correctly identifying a character. But overall performance of an Optical Character Recognizer depends on the performance of the pre-processing steps also. Segmentation of lines, words and characters is not an easy task. If the accuracy of segmentation can be improved then the reliability of an OCR system increases. Again there are some other statistical as well as structural feature extraction methods which are so significant in terms of extracting impeccable features from the object. These feature sets may also be fused to analyze the performance the OCR system.