Abstract

Optical Braille Recognition (OBR) system is computer software that automates the process of acquiring and processing images of Braille documents. It converts images of embossed Braille characters into their corresponding natural language characters. This involves few steps that include: Image Acquisition, Image pre-processing, segmentation, dot recognition and converting into computerized textual form. This review traces the earlier works carried out by the researchers on the development of OBR. In this study we try to highlight on the existing OBR solutions with special emphasis on dot recognition of the Embossed Braille Image characters.

References

- Tavel, P. 2007 Modeling and Simulation Design. AK Peters Ltd.
- Zhang, Xuan; Ortega-Sanchez, Cesar; Murray, lain; "Hardware-based
A Review on Software Algorithms for Optical Recognition of Embossed Braille Characters


- Zhang S and Yoshino K: A braille recognition system by the mobile phone with embedded camera. ICICIC 2007: 1321-1324

- Abdul Malik Al-Salman, Yosef ALOHAi, Mohammed ALKanhal and Abdulla AlRajith: An Arabic Optical Braille Recognition System. ICTA 2007 April 12-14


- Srinath S., C. N. Ravi Kumar: An Insight into Optical Braille Character Recognition since its Conceptualisation. International Journal of Computer Applications,
Vol. 33, No. 6 November 2011.


Shumet Tadasse, A Masters thesis on "Feature Extraction and Classification schemes for Enhancing Braille Recognition system", submitted to the school of graduate studies of Addis, June 2011.


WHO Available at: http://www.who.int

Index Terms

Computer Science

Pattern Recognition
Keywords
Braille  Inter-Point Braille  Braille Cell Dimensions  Grade I  Grade II  Grade III.