Abstract

Documents acquired by the blind and visually impaired people always have a degree of inclination, overlap between the characters and 3D geometric transformations. To solve these problems, firstly, a detection and correction of the tilt of the document is applied by the Hough Transform (HT) on the interest points detected on the document image. After separating the text zones from the other objects, the partial projection is used to estimate the beginnings of lines for every text zone. Finally, extraction the lines of documents is done by following the baselines. The proposed method tested on the database used for the ICDAR2015 competition leads to better results for line extraction.

References

16. Sakhi, O. B: Segmentation of heterogeneous document images. 2012. an approach based on machine learning, connected components analysis, and texture analysis. Université Paris-Est. PARIS
Novel Approach to Extract Lines of Documents for Blind and Impaired People

Index Terms

Computer Science Information Systems

Keywords

Blind and visually impaired people; Lines segmentation; Partial projection; Hough Transform; interest points.