Abstract

Text information in natural scene images serves as important clues for many computer vision applications such as content-based image retrieval, tourist translator, and assistive navigation. Extraction of such information from natural scene images, involves number of sub stages represented by text information extraction (TIE) system. However, performance of such system is greatly influenced by text localization module. Lots of work has been reported in this field, but it still remained as a challenging problem, due to two main issues: different variety of text patterns like sizes, fonts, orientations, colors, and presence of background outliers similar to text characters, such as windows, bricks. The purpose of this paper is to study and surveyed existing text localization method and challenges for the same.

References

- B. Epshtein, E. Ofek, and Y. Wexler. "Detecting text in natural scenes with stroke..."
width transform; CVPR 2010, pp. 2963-2970.


- Quan Meng, Yonghong Song, Yuanlin Zhang, Yang Liu; Text Detection in natural scene with edge analysis; IEEE 2013.

- Xiaobing Wang, Yonghong Song, Yuanlin Zhang; Natural Scene Text Detection with Multi-channel Connected Component Segmentation; ICDAR 2013: 1375-1379.


- Xu-Cheng Yin, Xuwang Yin, Kaizhu Huang, and Hong-Wei Hao; Robust Text Detection in Natural Scene Images; IEEE TRANSACTIONS on Pattern Analysis and Machine Intelligence, VOL. 36, NO. 5, MAY 2014.


- S. A. Angadi, M. M. Kodabagi (2009); A Texture Based Methodology For Text Region Extraction From Low Resolution Natural Scene Images; International Journal Of Image Processing (Ijip), Volume(3), Issue(5).

A Survey on Text Localization Method in Natural Scene Image

- Derek Ma, Qiuhau Lin, Tong Zhang, "Mobile Camera Based Text Detection and Translation", Stanford University, Nov 2000.
- Adrian Canedo and Jung H. Kim, "English to Spanish Translation of Signboard Images from Mobile Phone Camera", SOUTHEASTCON 2009 IEEE.

Index Terms

Computer Science
Image Processing

Keywords

Scene text detection  Scene text localization  Scene text extraction  Connected component (CC)-based approach
CC clustering.