

Text Extraction from an Image

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Abstract: Text extraction from an image is an important process in many applications such as document analysis, content-based image retrieval, and image captioning. This mini project aims to propose a method for accurately extracting text from an image using image processing techniques and machine learning algorithms. The proposed method involves several steps, including image preprocessing, text detection, localization, segmentation, and recognition. The effectiveness of the proposed method is evaluated through qualitative and quantitative analysis of the results obtained from sample images. The findings of the project demonstrate the potential of the proposed method for text extraction from images and highlight areas for further research and improvements.

Keywords: Text extraction

REFERENCES

- [1] Byun, H.R., Roh, M.C., Kim, K.C., Choi, Y.W., and Lee, S.W. 2002. Scene Text Extraction in Complex Images. In Proc. DAS-2002, LNCS 2423. 329-340.
- [2] Wang, J.Z., Li, J., and Wiederhold, G. 2001, SIMPLiCity: Semantics-Sensitive Integrated Matching for Picture Libraries. IEEE Transactions on Pattern Analysis and Machine, 947-963.
- [3] Wolf, C., and Jolion, J.M. 2004. Model Based Text Detection in Images and Videos: A Learning Approach. Technical Report LIRIS RR.
- [4] Niblack, W. 1993. The QBIC Project: Querying Images by Content Using Color, Texture and Shape. In Proc. Storage and Retrieval for Image and Video Databases, SPIE Bellingham, Wash, 173-187.
- [5] Jain, A.K., and Yu, B. 1998. Automatic Text Location in Images and Video Frames, Pattern Recognition Society. Vol. 31(12), 2055-2076.