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Computing and Information Technology
© 2016 by IJCA Journal

TACIT 2016 - Number 1

Year of Publication: 2016

{/tag}

IJCA Proceedings on Trends in Advanced

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{bibtex}tacit34.bib{/bibtex}

Abstract

Content extraction from badly degraded ancient document is very challenging task due to the different causes of degradation. Ancient documents are of great importance to us and accumulate a significant amount of human heritage over times. These ancient documents are in the degraded form containing vital and valuable information but the contents of the document not recognized easily. There are many causes of degradations such as environmental factors improper handling and the poor quality of the materials. In recent period, the rising interest in the historical document image analysis many researchers are attracting towards extraction of contents from historical document and preserve their contents for future generations. Numerous methods exist but they are not suitable for all types of degraded documents. The

proposed method is simple, robust and based on the phase binarisation model. The proposed method is divided into Preprocessing, Post processing and extraction. The Preprocessing helps to separate foreground and background. The post processing enhances the document image and Extraction helps to extract the content from the document image.

Refer

ences

- Hossein Ziaei Nafchi, Reza Farrahi Moghaddam Member, IEEE and Mohamed Cheriet, Senior Member, IEEE, "Phase-based binarization of ancient document images: Model and applications", 10.1109/TIP.2014.2322451, IEEE Transactions on Image Processing.
- Sitti Rachmawati Yahya, S. N. H. Sheikh Abdullah, K. Omar, M. S. Zakaria, and C.-Y. Liang, "Review on Image Enhancement Methods of Old Manuscript with Damaged Background", International Journal on Electrical Engineering and Informatics - Volume 2 Number 1, 2010.
- Prashali Chaudhary, B. S. Saini, "An Effective And Robust Technique For The Binarization Of Degraded Document Images", International Journal of Research in Engineering and Technology eISSN: 2319-1163 | pISSN: 2321-7308 Jun-2014.
- Brij Mohan Singh, Mridula, "Efficient binarization technique for severely degraded document Images", @ CSI Publications 2014.
- N. Chaki, "A Comprehensive Survey on Image Binarization Techniques", Exploring Image Binarization Techniques, Studies in Computational Intelligence 560, DOI: 10.1007/978-81-322-1907-1_2, © Springer India 2014.
- Bolan Su, Shijian Lu, and Chew Lim Tan, "Robust Document Image Binarization Technique for Degraded Document Images", IEEE Transactions On Image Processing, Vol. 22, No. 4, April 2013.
- Deepika Ghai, Neelu Jain "Text Extraction from Document Images- A Review", International Journal of Computer Applications (0975 – 8887) Volume 84 – No 3, December 2013.
- N. Venkata Rao, A. V. Srinivasa Rao, S. Balaji and L. Pratap Reddy, "Cleaning of Ancient Document Images Using Modified Iterative Global Threshold", IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 6, No 2, November 2011.
- N. Zaghden, B. Khelifi, A. M. Alimi, R. Mullot, "Text Recognition In Both Ancient And Cartographic Documents", Digital Heritage – Proceedings of the 14th International Conference on Virtual Systems and Multimedia VSMM 2008.
- Laurence Likforman-Sulem, Abderrazak Zahour, Bruno Taconet, "Text Line Segmentation of Historical Documents: a Survey", International Journal on Document Analysis and Recognition, Springer, 2006.

Index Terms

Computer Science

Image Processing

Keywords

Degradation Phase Binarization Local And Global Thresholding