A

Dissertation

On

BINARIZATION TECHNIQUE FOR THE DEGRADED DOCUMENT IMAGES AND INSCRIPTION IMAGES

Submitted in partial fulfillment of the requirement for

The award of Degree of

MASTER OF TECHNOLOGY

(SIGNAL PROCESSING AND DIGITAL DESIGN)

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2012-2014

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The dissertation is a bonafide work record of project work carried out by her under my guidance and supervision. Her work is found to be outstanding and his discipline impeccable during the course of the project.

I wish her success in all her endeavors

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ACKNOWLEDGMENT

The completion of any project brings with it a sense of satisfaction, but it is never complete without thanking those people who made it possible and whom constant support has crowned my efforts with success.

One cannot even imagine the power of the force that guides us all and neither can we succeed without acknowledging it. My deepest gratitude to **Almighty God** for holding my hands and guiding me throughout my lives.

I would like to thank my beloved parents, who always give me strong inspirations, moral supports, and helpful suggestions. Without them, my study career would never have begun. It is only because of them, my life has always been full of abundant blessing.

I would like to devote my gratitude and thanks to my guide **Dr. S.Indu**, **Associate Professor, Department of Electronics and communication Engineering, Delhi Technological University,Delhi** for her valuable guidance, constant encouragement and helpful discussions throughout the course of this work. Obviously, the progress I had now will be uncertain without her guidance.

I would also like to thank **Prof. Rajiv kapoor**, **H.O.D. Electronics and communication Engineering Department, Delhi Technological University, Delhi** for providing me better facilities and constant encouragement.

At last but not least I would like to express my vote of thanks to my friends for their support and encouragement.

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ABSTRACT

Over a decade,text extraction of document has been a subject of intrest for the research,but a very few work has been done in digitizing inscription images of historical monuments.

For unclear and complex archaeological inscription images,there is no sharp distinction between foreground and background.There are several problems in the text of inscription images,such problems are like there is low contrast between text and background thus the use of previously available method unsuitable. For the regions having high edge density and strength simple edge-based approaches are also considered useful. This edge-based method give good result if background is not complex,but for the inscription images background is complex,thus this method cannot be used directly.

Badly degraded images which is having high inter/intravariation between the background and the foreground text,the segmentation of the text becomes a big challenge.

This thesis propose a novel document image binarization technique for the monument inscription that earliar was used for the binarization of degrade document images.The proposed method is basically an adaptive image binariztion technique.In this first an adaptive contrast map is constructed for the input inscription image.The contrast map is then binarizd and then combined with canny's edge map to identify the text stroke edge pixels.Local threshold that is estimated on the intensities of detected text stroke edge pixels within a local window,is further applied for the document tex segmentation.the proposed method is very simple, robust and it involves minimum parameter tuning.

It has been applied on different monuments inscription images and have given good results.

Organizatin of Thesis

Chapter 1:-The first chapter gives the brief introduction of the proposed method and its related problems.

Chapter 2:-The second chapter gives briefly reviews the literature,related and the previous work done.

Chpater 3:-The third chapter give the detailed description of the techniques used and the motivation for the proposed method.

Chapter 4:-The fourth chapter gives the detailed explanation of the proposed method .

Chapter 5:-The chapter is about the experiment and discussion.

Chapter 6:-The chapter seven discusses the results obtained after applying the proposed method.

Chapter 7:-Finally in this chapter thesis is concluded with the future scope.

Table of contents

Cover page			i
Certificate			ii
Acknowledgement			iii
Abstract			iv
Organization of thesis			v
Contents			vi
List of figures			viii
S.NO		**CHAPTER NAME**	**PAGE NO**
1		**Introduction…….**	1
	1.1	General…….	2
2		**Literature review……**	6
	2.1	Introduction…….	7
	2.2	Adaptive binarization…….	7
	2.2.1	Iterative global thresholding……..	9
	2.2.2	Mathematical analysis……	9
	2.3	Morphological approach……	10
	2.3.1	Pre-processing……..	10
	2.3.2	Foreground area estimation…….	11
	2.3.3	Localization of text area……..	11
	2.4	Efficient method of binarization…….	12
	2.4.1	Pre-processing……	13
	2.4.2	Combination of several binarization technique…..	15
	2.4.3	Inclusion of edge information……	15
	2.4.4	Enhancement……..	18

3 Techniques used in proposed method…… 20
3.1 Introduction……. 21
3.2 Local image gradient…….. 21
3.3 Local image contrast……..... 21
3.4 Motivation for the proposed method…… 22
4 Proposed method…….. 23
4.1 Introduction…… 24
4.2 Contrast image construction……..... 24
4.3 Text edge pixel detection…… 28
4.4 Local threshold estimation…… 31
4.5 Post-processing…….. 33
6 Experiment and discussion…….. 35
6.1 General…… 36
6.2 Parameter selection…… 36
7 Results……..... 38
7.1 Result on inscription images…… 39
7.2 Result on degraded document images…….. 43
7.3 Discussion…… ……. 47
8 Conclusion and future scope……… 49
8.1 General……. 50
8.2 Main conclusion…….. 50
8.3 Future work……. 51
REFERENCES…… 52
Appendix-1…… 57
Appendix-2……..... 59
Appendix-3……..... 60
Appendix-4……..... 61

List of figures

Figure no.	Description	Page
1	Example of degraded document image	3
1.1.2	Example of inscription images in different conditions	4
2.4.1	Edge maps of degraded document image	16
2.4.2	Example of run-length smoothing algorithm	17
2.4.3	Example of incorporation of edge information in the binary image	18
4.2.1	Contrast image construction using various method on document images	25
4.2.2	Contrast image construction using various method on inscription images	26
4.3.1	Resultant binary image,egde image and combined image of both	29
4.3.2	Resultant binary image,edge image and combination of both	30
4.4	Histogram of distance between adjacent pixel	32
5.2.1	Mean and variation of the α values on dataset for different values of γ	36
5.2.2	F-measure performance on dataset images using different γ power functions	37
6.1.1	First Input inscription image and the final resultant image.	39
6.1.2	Input inscription image and the final resultant binary image	39
6.1.3	Input inscription image and the final resultant binary image	40
6.1.4	Input inscription image and the final resultant binary image	40
6.1.5	Input inscription image and the final resultant binary image	40
6.1.6	Input inscription image and the final resultant binary image	41
6.1.7	Input inscription image and the final resultant binary image	41
6.1.8	Input inscription image and the final resultant binary image	42
6.1.9	Input inscription image and the final resultant binary image	42
6.1.10	Input inscription image and the final resultant binary image	42

6.1.11 Input inscription image and the final resultant binary image 43

6.2.1 First input degraded image and its final binarized output 43

6.2.2 input degraded image and its final binarized output 43

6.2.3 input degraded image and its final binarized output 44

6.2.4 input degraded image and its final binarized output 44

6.2.5 input degraded image and its final binarized output 45

6.2.6 input degraded image and its final binarized output 45

6.2.7 input degraded image and its final binarized output 46

6.2.8 input degraded image and its final binarized output 46

6.2.9 input degraded image and its final binarized output 47