









superlative technique for all assessment parameters or input document images. Expansion of thresholding techniques for document images is vital and needed. Alternatively one may use multi-stage thresholding or hybrid thresholding algorithm.

- Degradation Model”; in IEEE Trans. Image Processing, vol.9, pp.909-922, 2000.
- [17] Stathis, Kavallieratou, Papamarkos, “An Evaluation Technique for Binarization Algorithms”, Journal of Universal Computer Science, vol. 14, no. 18 (2008), 3011-3030.

## References

- [1] 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.
- [2] Yung-Hsiang Chiu , Kuo-Liang Chung , Wei-Ning Yang, Yong-Huai Huang and Chi-Huang Liao, “Parameter-free based two-stage method for binarizing degraded document images”, Y.-H. Chiu et al. / Pattern Recognition 45 (2012) 4250–4262, Elsevier 2012.
- [3] Konstantinos Ntirogiannis, Basilis Gatos and Ioannis Pratikakis, “A Performance Evaluation Methodology for Historical Document Image Binarization”, IEEE 2011.
- [4] Vavilis Sokratis, Ergina Kavallieratou, Roberto Paredes and Kostas Sotiropoulos, “A Hybrid Binarization Technique for Document Images”, Springer 2011.
- [5] Trier and Taxt, “Improvement of ‘integrated function algorithm’ for binarisation of document images”, Pattern Recognition Letters, 16, pp. 277–283, 1995.
- [6] Ramesh, N., Yoo, J.H., Sethi, I.K., “Thresholding based on histogram approximation”, IEE Proc.-Vis.Image Signal Process., Vol.142, No.5 pp: 4147, 1995.
- [7] Jain, A. K., and Dubes, R. C.: "Algorithms for Clustering Data", Prentice Hall, 1988.
- [8] Yen, J.C., Chang, F.J., and Chang, S., “A New Criterion for Automatic Multilevel Thresholding”, IP (4), No. 3, March pp. 370-378, 1995.
- [9] Kittler, J., Illingworth, J., “On threshold selection using clustering criteria”, IEEE Trans. Systems Man Cybernet.15, 652–655, 1985.
- [10] Papamarkos N., and Atsalakis, A.: "Gray-level reduction using local spatial features"; Computer Vision and Image Understanding, pp. 336-350, 2000.
- [11] Sauvola, J., Pietikainen, M.: "Adaptive document image binarization "; Pattern Recognition 33, 225–236, 2000.
- [12] Brink, A.D., Pendock, N.E.: “Minimum Cross-Entropy Threshold Selection”; PR (29), pp. 179-188, 1996.
- [13] Gatos, B., Pratikakis, I.E., Perantonis, S.J.: “Adaptive degraded document image binarization”; Pattern Recognition (39), No. 3, pp. 317-327, 2006.
- [14] Vonikakis, V., Andreadis, I., and Papamarkos, N.: "Robust Document Binarization with OFF Center-surround Cells"; Pattern Analysis & Applications, to appear.
- [15] Kavallieratou, E.: “A Binarization Algorithm Specialized on Document Images and Photos”; 8th Int. Conf. on Document Analysis and Recognition, 2005, pp.463-467.
- [16] Kite, T.D., Evans, B.L., Daamera-Venkata, N., and Bovil, A.C., “Image Quality Assessment Based on a