

Research Paper on Text Extraction using OCR

Prof. Anuradha Thorat¹, Mayur Zagade², Shivani More³, Manish Pasalkar⁴, Anand Narute⁵

Assistant Professor, Department of Information Technology¹

Student, Department of Information Technology^{2,3,4,5}

Zeal College of Engineering and Research, Pune, India

Abstract: Text extraction from images is a challenging task with numerous applications in fields such as document digitization, information retrieval, and image understanding. Extracting text accurately and efficiently from images is crucial for enabling automated processes and facilitating the analysis of large volumes of visual data. This abstract provides an overview of text extraction from images, focusing on recent advancements and techniques employed in this area. Traditional methods for text extraction from images involved preprocessing steps, such as binarization and noise removal, followed by techniques like connected component analysis and optical character recognition (OCR). These approaches often faced challenges in handling complex backgrounds, varying fonts, and distorted or degraded text.

Keywords: Digitization, Binarization, Extracting.

REFERENCES

- [1] X. Liu, D. Liang, S. Yan, D. Chen, Y. Qiao, and J. Yan, "FOTS: Fast oriented text spotting with a unified network," in Proc. IEEE/CVF Conf. Comput. Vis. Pattern Recognit., Jun. 2018, pp. 5676–5685.
- [2] S. Unar, A. H. Jalbani, M. M. Jawaid, M. Shaikh, and A. A. Chandio, "Artificial urdu text detection and localization from individual video frames," Mehran Univ. Res. J. Eng. Technol., vol. 37, no. 2, pp. 429–438, 2018.
- [3] A. Mirza, M. Fayyaz, Z. Seher, and I. Siddiqi, "Urdu caption text detection using textural features," in Proc. 2nd Medit. Conf. Pattern Recognit. Artif. Intell., 2018, pp. 70–75.
- [4] C. Yao. MSRA Text Detection 500 Database (MSRA-TD500). Accessed: Aug. 2018 [Online].
- [5] A. A. Chandio and M. Pickering, "Convolutional feature fusion for multilanguage text detection in natural scene images," in Proc. 2nd Int. Conf. Comput., Math. Eng. Technol. (iCoMET), Jan. 2019, pp. 1–6.
- [6] A. A. Chandio and M. Pickering, "Convolutional feature fusion for multilanguage text detection in natural scene images," in Proc. 2nd Int. Conf. Comput., Math. Eng. Technol. (iCoMET), Jan. 2019, pp.1–6.