

# Automatic Signature and Photo Detection from the Uploaded Document using AI and OCR

**Prof. Rajesh Nasare, Ayush Namdeo, Lokesh Bagmare, Omkant Shende, Anshini Kumbhare, Nishank Hedao, Soham Sahare**

Department of Artificial Intelligence Engineering  
G. H Raisoni Institute of Engineering and Technology, Nagpur, India

**Abstract:** *In our modern era, it is important for organizations in different industries to have efficient document processing capabilities. One key aspect is the identification of signatures and images in documents, which typically requires manual review. Fortunately, advancements in Artificial Intelligence (AI) and Optical Character Recognition (OCR) technologies present viable options for automating this task. This paper presents a novel method that utilizes AI and OCR techniques to automatically identify signatures and images in uploaded documents. The process starts with preparing documents and utilizing AI technology for recognizing signatures and photos. Optical Character Recognition (OCR) is also used for a thorough examination. This method enhances efficiency, precision, and adaptability in handling documents. It is applicable in various fields like finance, legal, and administration. The solution aims to transform document processing by providing a smooth and dependable way to detect signatures and photos in the modern age.*

**Keywords:** Automatic signature detection, Photo recognition, Artificial Intelligence (AI), Optical Character Recognition (OCR), Document processing, Digital document analysis, Machine learning, Image processing, Efficiency, Accuracy, Workflow automation, Document authentication, Fraud detection, Identity verification, Scalability, Integration, Security and privacy, User interface design, Financial sector, Legal sector

## X. REFERENCES

- [1]. Marinai, S. (2008). Introduction to Document Analysis and Recognition. In S. Marinai & H. Fujisawa (Eds.), *Machine Learning in Document Analysis and Recognition* (pp. 1–20). Springer.
- [2]. Molodoria, A. (Year). *Optical Character Recognition Technology for Business*.
- [3]. El Melhaoui, O., Benchaou, S. (2022). An Efficient Signature Recognition System Based on Gradient Features and Neural Network Classifier. *Procedia Computer Science*, 198, 385-390. <https://doi.org/10.1016/j.procs.2021.12.258>
- [4]. Kumar, C. R., N, S., Priyadharshini, M., Gilchrist, D. E., Rahman, K. M. (2023). Face recognition using CNN and siamese network. *Measurement: Sensors*, 27, 100800. <https://doi.org/10.1016/j.measen.2023.100800>
- [5]. El Melhaoui, O., Benchaou, S. (2022). An Efficient Signature Recognition System Based on Gradient Features and Neural Network Classifier. *Procedia Computer Science*, 198, 385-390. <https://doi.org/10.1016/j.procs.2021.12.258>
- [6]. Kumar, C. R., N, S., Priyadharshini, M., Gilchrist, D. E., Rahman, K. M. (2023). Face recognition using CNN and siamese network. *Measurement: Sensors*, 27, 100800. <https://doi.org/10.1016/j.measen.2023.100800>