

S.NO	TITLE	YEAR	AUTHOR	JOURNAL NAME	METHODOLOGY	LIMITATIONS
1	Comparative Study on Handwritten Digit Recognition Classifier Using CNN and Machine Learning Algorithms	2022	Tanuja Kumari, Yatharth Vardan, Prashant Giridhar Shambhar, Yash Gandhi	IEEE	Convolutional Neural Networks (CNN), K-Nearest Neighbor, and Support Vector Machine	New algorithms can Be used for increase efficiency
2	Handwritten numeral recognition through superimposition onto printed form	2022	M.I.R.ShuvoaM.A. AkhandaNazmul Siddiqueb	Science Direct	CNN(Convolution neural Network)	Not able to detect due to higher distortion and ambiguity of the input
3	Application of Multicategory Handwritten Letters, Numbers and Symbols Recognition Based on Convolutional Neural Networks	2022	Ke Hong, Sizhe Li, Yajing Wang, Xuan Zhang	IEEE	convolutional neural networks (CNN)	Do not support High Resolution
4	Recognition of Handwritten Digits Based on Images Spectrum Decomposition	2021	Zufar Kayumov, Dmitrii Tumakov,	IEEE	CNN(Convolution neural network)	The recognition ability of adhesive handwritten numer images in different backgrounds.
5	Real Time Handwritten Digits Recognition Using Convolutional Neural Network	2021	Kaveti Upender, Venkata Siva Kumar Pasupuleti	IEEE	OpenCV python library, Machine learning, Deep Learning.	Improving the Model Accuracy
6	Classification of printed text and handwritten	2020	K. Bramara Neelim Dr.S. Arulselvi	Journal of critical reviews	ANN,AVM, OCR, KNN	Graphics and fonts are not handled in this paper.

	characters with neural networks.					
7	Classification of Text regions in a Document Image by Analyzing the properties of Connected Components	2020	Showmik Bhowmik; Ram Sar	IEEE - International journal of pure and applied mathematics	Text region classification, Connected Component Analysis, Document Layout Analysis, RDCL 7BINYAS.	Issue of non-horizontally aligned text. complex semantic classification of regions like abstract, paragraph-heading, figure and table caption etc.
8	Automatic Deep Understanding of Tables in Technical Documents	2020	Michail S. Alexiou; Nikolaos Bourbakis	IEEE-International Journal of Engineering & Technology	Convolutional Neural Network(CNN) model, Optical character recognition (OCR)	This can not be applicable for mixed tables and no-line tables. Applicable only for simple, multidimensional and extended tables.
9	Quality-related English Text Classification Based on Recurrent Neural Network	2019	Cheng Liu, Xiaofan Wang	Elsevier journal	KNN, naive Bayes, RNN, KNN, SVM	When English is mixed with other language, it is difficult to identify
10	Steps involved in text recognition and research in OCR	2019	K.Karthick, K.B.Ravindrakumar, R.Francis, S.Ilankannan	IEEE-International journal of recent technology and engineering	Optical character recognition (OCR)	Multilingual character segmentation and recognition also possible
11	A Streamlined Classification System for Handwritten Marathi Text Document Classification and Recognition	2018	Surendra Pandurang Ramteke, Ajay Anil Gurjar, Dhiraj Sheshrao Deshmukh	IEEE-International Journal of Intelligent Engineering and systems	OCR, PCA, SVM, ANN	Other clustering or classification systems like fuzzy neural network and genetic algorithm
12	An Efficient Character Recognition Technique Using K-Nearest Neighbor	2018	Nawaf Hazim Barnouti, Mohammed Abomaali, Mohanad Hazim Nsaif Al-Mayyahi	IEEE-International Journal of Engineering & Technology	OCR, KNN	Small number of dataset is used.

	Classifier					
13	Document Classification using Various Classification Algorithms	2018	Bipanjyot Kaur , Gourav Bathla	IEEE-International Journal on Future Revolution in Computer Science & Communication Engineering	Decision tree, SVM, Naive Bayes,ANN	Need to analyse text classification with maximum metrics
14	Table detection using Deep Learning	2017	Azka Gilani; Shah Rukh Qasim; Imran Malik; Faisal Shafait	IEEE-International journal on document analysis and recognition	OCR	Fails to localize table regions if it is spanned across multiple columns
15	Segmentation and recognition of text from image using SVM classifier	2017	N.Anandhi , R. Avudaiammal	IEEE-International journal of pure and applied mathematics	OCR,SVM	Text is not directly extracted from image