

Project Batch/Name: B2-2M4E/ A Novel Method for Handwritten Digit Recognition System

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| AUTHOR | TITLE/ PUBLISHED IN | MEDHOLOGY | INFERENCE | PROS | CONS |
|---|---|---|--|---|--|
| Anchit Shrivastava; Isha Jaggi; Sheif ali Gupta; Deepali Gupta. | Handwritten Digit Recognition Using Machine Learning: A Review/ 2019 2nd International Conference on Power Energy, Environment and Intelligent Control (PEEIC). | A number of 60,000 images were used as training sets of images with pixel size of 28×28. | The existing methods and techniques for handwritten digit recognition were reviewed and understood to analyze the most suitable And best method for digit recognition. | To analyze the most suitable and best method for digit recognition with a number of 60,000 images. | To complete analysis and review that classifier ensemble system has error rate of 0.32%. |
| Chao Zhang; Zhiyao Zhou; Lan Lin | Handwritten Digit Recognition Based on Convolutional Neural Network/ 2020 Chinese Automation Congress (CAC). | This paper proposes a new type of handwritten digit recognition system based on convolutional neural network (CNN). | Handwritten digit recognition plays an important role in large-scale data statistics and the financial business. | The system uses the camera to capture the pictures composed of the images generated by the test data set of MNIST and refreshes the output every 0.5 second with accuracy rates of 97.3%. | The recognition of number is slightly deviated which may cause a big mistakes and the error can not be detected through the context. |

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| R. Reeve Ingle; Yasu hisa Fujii; Thomas. Deselaer Jonathan Baccash Ashok C. Popat. | A Scalable Handwritten Text Recognitio n System/ 2019 Internation al Conference on Document Analysis and Recognition (ICDAR). | HTR capability to a large scale multilingual OCR system poses new challenges. | Handwritten Text Recognition (HTR) . | The model achieves a comparable accuracy with LSTM based models while allowing for better parallelism in training and inference. | The term recurrent in GRCL is used to mean recurrency along depth. The recurrency along time is wrong. |
| Sai Abhishikth Ayyadevar a; P N V Sai Ram Teja; M Rajesh Kumar | Handwritten Character Recognition using Unique Feature action Technique/ 2018 3rd IEEE International Conference on Trends Electronics, Information (RTEICT). | It is a combination of unique features of geometric, zone-based Hybrid,gradient features extraction approaches. | One of the most arduous and captivating domains under image processing is handwritten character recognition. | The procedures lead to the conclusion that the proposed algorithm is accurate than its individual counter parts and that CNN is the neural network of the three in consideration. | The computer process a huge amount of data and locate patterns and hidden rules in the data. These rules and patterns are numerical in nature. |
| Vaibhav. V. Mainkar; Jyoti A. Katkari; Ajinkya B. Upade; Poonam R. Pednekar | Recognition to Obtain Editable Handwritten Character /2020 International Conference on Electronics and Sustainable Communi cation Systems (ICESC) | It involves several steps including pre-processing, segmentation, feature extraction and post processing. | The method to transform handwritten data into electronic format is 'Optical Character Recognition'. | The system offers 90%accuracy for handwritten documents and gives the easiest way to edit or share the recognized data. | 100% accuracy is not achieved and it is very complex. |