

# A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

## *LITERATURE SURVEY*

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### **Introduction:**

Handwriting recognition is one of the compelling research works going on because every individual in this world has their own style of writing. It is the capability of the computer to identify and understand handwritten digits or characters automatically. Because of the progress in the field of science and technology, everything is being digitalized to reduce human effort. Hence, there comes a need for handwritten digit recognition in many real-time applications. MNIST data set is widely used for this recognition process and it has 70000 handwritten digits. We use Artificial neural networks to train these images and build a deep learning model. Web application is created where the user can upload an image of a handwritten digit. This image is analyzed by the model and the detected results are returned on to UI.

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2. [A Novel Method for Hand Written Digit Recognition using Deep Learning](#), Rohini.M, Dr.D. Surendran
3. [Handwritten Digit Recognition using Machine Learning Algorithms](#), S M Shamim, Mohammad Badrul Alam Miah, Angona Sarker, Masud Rana & Abdullah Al Jobair
4. [A Novel Handwritten Digit Classification System Based on Convolutional Neural Network Approach](#), Ali Abdullah Yahya, Jieqing Tan and Min Hu

5. [Recognition of Handwritten Digit using Convolutional Neural Network in Python with Tensorflow and Comparison of Performance for Various Hidden Layers](#), Fathma Siddique, Shadman Sakib, Md. Abu Bakr Siddique
6. [Recognition of Handwritten Digit using Convolutional Neural Network \(CNN\)](#), Md. Anwar Hossain & Md. Mohon Ali
7. [Handwritten Digit Recognition using CNN](#), Vijayalaxmi R Rudraswamimath, Bhavanishankar
8. [Review on Deep Learning Handwritten Digit Recognition using Convolutional Neural Network](#), Akanksha Gupta, Ravindra Pratap Narwaria, Madhav Singh
9. [Fast Efficient Artificial Neural Network for Handwritten Digit Recognition](#), Viragkumar N. Jagtap, Shailendra K. Mishra
10. [Handwritten Digit Recognition Using Opencv and CNN](#), Swetha, Hithaishi, Tejaswini, Parthasaradhi, Venkateswara Rao
11. [Comparative Study on Handwritten Digit Recognition Classifier Using CNN and Machine Learning Algorithms](#), Tanuja Kumari, Yatharth Vardan, Prashant Giridhar Shambharkar, Yash Gandhi
12. [Review on Deep Learning Handwritten Digit Recognition using Convolutional Neural Network](#), Akanksha Gupta, Ravindra Pratap Narwaria, Madhav Singh
13. [Fast Efficient Artificial Neural Network for Handwritten Digit Recognition](#), Viragkumar N. Jagtap, Shailendra K. Mishra
14. [Handwritten Digit Recognition Using Opencv and CNN](#), Swetha, Hithaishi, Tejaswini, Parthasaradhi, Venkateswara Rao
15. [Comparative Study on Handwritten Digit Recognition Classifier Using CNN and Machine Learning Algorithms](#), Tanuja Kumari, Yatharth Vardan, Prashant Giridhar Shambharkar, Yash Gandhi