LITREATURE SURVEY- 1

TITLE:

A Novel Method for Handwritten Digit Recognition Using Deep Learning

AUTHOR:

ROHINI.M, DR.D.SURENDRAN.

YEAR:

2019

DESCRIPTION:

This paper proposes a novel method for preparing the trained model which will be used to classify the digits present in the test data. Thus, we can classify the digits present in the images as: Class 0,1,2,3,4,5,6,7,8,9 and can recognise digits based on classes.

ADVANTAGES:

The results can be made more accurate with more convolution layers and more number of hidden neurons.

DISADVANTAGES:

Long training time. In order for high accuracy in the traininng process should use many samples.

METHODOLOGY:

The project aims to implement the concept of Convolution Neural Network which is one of the important architecture of deep learning.

LITREATURE SURVEY- 2

TITLE:

Fast Efficient Artificial Neural Network for Handwritten Digit Recognition.

AUTHOR:

VIRAGKUMARr N. JAGTAP, SHAILENDRA K. MISHRA.

YEAR:

2014

DESCRIPTION:

Implementing method and architecture uses GPUs for parallel processing to speed up learning process Our study forces us to improve following parameters to be considered to improve the system.

ADVANTAGES:

1) Decrease training time without affecting accuracy.

2) Implementing method and architecture uses GPU for parallel processing to speed up learning process.

DISADVANTAGES:

There will be many challenges because of the different styles of writing by different people.

METHODOLOGY:

Backward propagation algorithm is used in this method.

LITREATURE SURVEY- 3

TITLE:

Intelligent Handwritten Digit Recognition using Artificial Neural Network

AUTHOR:

SAEED AL MANSOORI

YEAR:

2015

DESCRIPTION:

The aim of this paper is to implement a Multilayer Perceptron (MLP) Neural Network to recognize and predict handwritten digits from 0 to 9.

ADVANTAGES:

It is more complex and there is a problem in segmentation method.

DISADVANTAGES:

Neural network architecture, Data collection and Gradient descent back propagation algorithms are used in this method.

METHODOLOGY:

Our method uses a HSV thresholding mechanism along with Contour detection to detect the region of interest in each frame of video sequences.

LITREATURE SURVEY- 4

TITLE:

Handwritten Digit Recognition Using Image Processing and Neural Networks

AUTHOR:

FAISAL TEHSEEN SHAH , KAMRAN YOUSAF.

YEAR:

2007

DESCRIPTION:

This working prototype system can detect using Neural network technique.

ADVANTAGES:

Hand writing recognition and Image detection through this methodology is very fast and effective as compared to old fashioned image pixel comparison.

DISADVANTAGES:

Less accuracy.

Can’t detect problem.

METHODOLOGY:

Neural Network, Recognition neurons are used in this method.

LITREATURE SURVEY- 5

TITLE:

A Survey on Feature Extraction Methods for Handwritten Digits Recognition

AUTHOR:

ISHANI PATEL, VIRAG JAGTAP , OMPRIYA KALE

YEAR:

2014

DESCRIPTION:

Handwritten digits from a scanned image of an input form by using Neural network technique.

ADVANTAGES:

The primary advantage is that the device can be carried out easily because of its low weight.Office automation, egovernors and many other areas, reading printed or handwritten documents and convert them to digital media is a very crucial and time-consuming task. So, the system should be designed in such a way that it should be capable of reading handwritten numerals and provide appropriate response as humans do.

DISADVANTAGES:

However, handwritten digits are varying from person to person because each one has their own style of writing, means the same digit or character/word written by different writer will be different even in different languages.

METHODOLOGY:

Feature extraction, Back propagation, Nearest Neighbor,Support Vector Machine are used as methods in this project.