Literature Survey

Abstract:

The purpose of this paper is to recognize and predict the handwritten digits from Zero to Nine using Artificial Intelligence and Neural network concepts. Handwritten digits might not be easy to decipher since every person's handwriting differs with time to time. Real-time application for Handwritten Digit Recognition System is when certain digits written in the cheque paper or an account number is written by the customer or user, the individual who checks the written digits might not be able to recognize the digits. Handwritten digits are identified and analyzed by a model, which is trained and tested with a dataset containing over 7000 different ways of handwritten digits.

What is it ?:

Handwritten Digit Recognition is an improving research, which recognizes the writings of every individual in this world using Convolutional Neural Network and Artificial Intelligence concepts. When a handwritten digit is sent as an image to process in the software, the model which was trained and tested, analyzes and identifies the digits and shows the output to the user.

Design:

The whole project is done using Artificial Intelligence and Deep Learning concepts, with Convolutional Neural Network as the main concept used to identify the different ways a digit is written and to recognize the input data which is given and retrieve the right output. Software that are used are Anaconda Navigator in which Jupiter notebook is used and IBM cloud, Tensor flow, Keras, IBM Watson Studio,IBM Cloudant DB and Python-Flask concepts are also used.

Findings:

This project is highly useful in Bank cheque processing, postal mail sorting, form data entry, number plate recognition, etc.