Problem Statement

Project Name: A Novel Method for Handwritten Digit Recognition System

Handwritten digit recognition is the capability of computer applications to recognize the human handwritten digits. It is a hard task for the machine because handwritten digits are not perfect and can be made with many different shapes and sizes. The handwritten digit recognition system is a way to tackle this problem which uses the image of a digit and recognizes the digit present in the image. Convolutional Neural Network model created using PyTorch library over the MNIST dataset to recognize handwritten digits .

Handwritten Digit Recognition is the capability of a computer to fete the mortal handwritten integers from different sources like images, papers, touch defences, etc, and classify them into 10 predefined classes **(0-9)**. This has been a Content of bottomless- exploration in the field of deep literacy. Number recognition has numerous operations like number plate recognition, postal correspondence sorting, bank check processing, etc . In Handwritten number recognition,   we face numerous challenges . because of different styles of jotting of different peoples as it is not an optical character recognition. This exploration provides a comprehensive comparison between different machine literacy and deep literacy algorithms for the purpose of handwritten number recognition. It is easy for humans to perform a task accurately by practising it repeatedly and memorising it for the next time. Human brain can process and analyse images easily. Also, recognize the different elements present in the images. In this competition, the goal is to correctly identify digits from a dataset of tens of thousands of handwritten images and experiment with different algorithms to learn first-hand what works well and how techniques compare.