PROBLEM STATEMENT

Handwritten Digit Recognition is the capability of a computer to fete the mortal handwritten integers from different sources like images, papers, touch defences, etc.. It 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 Optic character recognition. This exploration provides a comprehensive comparison between different machine literacy and deep literacy algorithms for the purpose of handwritten number recognition. For this, we've used Support Vector Machine, Multilayer Perceptron, and Convolutional Neural Network. The comparison between these algorithms is carried out on the base of their delicacy, crimes, and testing- training time colloborated by plots and maps that have been constructed using mat plot lib for visualization. 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.