PROJECT OBJECTIVE

Handwritten digit recognition by CNN Neural Convolutional Network For those of you who are unfamiliar with the idea, CNN is a deep learning method for automatically classifying the input. Using MNIST dataset the deep learning model is developed.The project is to develop the app using python.There have been a tonne of CNN classification techniques put forth in the literature. However, these algorithms do not take into account the proper filter size decision, data preprocessing, dataset restrictions, or noise. As a result, few algorithms have been able to significantly increase classification accuracy.Our paper makes the following contributions to solve these methods' drawbacks: First, the size is determined after taking domain knowledge into account. We can choose a typical filter with the aid of the ERF calculation, improving the accuracy of classification of our CNN. Second, excessive data produces inaccurate results, which has a detrimental impact on categorization accuracy. Prior to carrying out the data classification mission, data preparation is conducted to ensure that the dataset is devoid of any unnecessary or redundant variables to the goal variable.Thirdly, training dataset has been suggested as a way to reduce training and validation mistakes and get around dataset limitations.

KEYWORDS - Handwritten digit recognition, CNN, MNIST dataset, python, Deep learning.