A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

PROBLEM STATEMENT

The handwritten digit recognition is the ability of computers to recognize human handwritten digits. It is a hard task for the machine because handwritten digits are not perfect and can be made with many different styles. The handwritten digit recognition is the solution to this problem which uses the image of a digit and recognizes the digit present in the image.

Question	Description
What are the benefits?	The generative models can perform recognition driven segmentation. The method involves a relatively small number of parameters and hence training is relatively easy and fast.
Why the issue occurs?	The similarity between digits such as I and 7, 5 and 6, 3 and 8, 2 and 7. So, classifying between these numbers is a major issue.
When does the issue occur?	The issue occurs when handwritten digits are not always of the same size, width, orientation, and justified to margins as they differ from writing of person to person.
How it is better?	Unlike many other recognition schemes, it does not rely on some form of pre-normalization of input images, but can handle arbitrary scalings, translations and a limited degree of image rotation.
Where it is used?	The digit recognition system is used in postal mail sorting, bank check processing, form data entry.