

PROBLEM STATEMENT

Handwriting recognition is one of the compelling research works going on because every individual in this world has their own style of writing. It is the capability of the computer to identify and understand handwritten digits or characters automatically. Because of the progress in the field of science and technology, everything is being digitalized to reduce human effort. Hence, there comes a need for handwritten digit recognition in many real-time applications. MNIST data set is widely used for this recognition process and it has 70000 handwritten digits. We use Artificial neural networks to train these images and build a deep learning model. Web application is created where the user can upload an image of a handwritten digit. This image is analyzed by the model and the detected result is returned on to UI

Who does the problem affect?	Workers at postal office sorting through mails, using code and classifying through manual labor
What are the boundaries of the problem?	Performing classifying, arranging records and mails upon loads of data
What is the issue?	Taking up lots of time and energy of man power, cost
When does the issue occur?	While using human skills for processing huge amount of data
Where does the issue occur?	This occurs in postal offices, bank check processing, data entry form
Why is it important that we fix the problem?	A system to process handwritten documents will be helpful in saving time and labor costs
What solution to solve this?	An artificial system that will recognize the handwriting and classify the digits will be helpful in automating huge data processing and sorting with less human intervention

What methodology to use to solve this issue?	Deep learning algorithms using neural networks can be utilized to recognize handwritten digits
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