**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. Since the style of handwriting changes with every individual, it is a challenging task in identifying the characters correctly. The thickness of stroke, style carries uniqueness with different people depending on them. 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. The MNIST data set is widely used for this recognition process and it has 70000 handwritten digits. Artificial neural networks are used to train these images and build a deep learning model. The Convolutional Neural Networks (CNN) is a deep learning algorithm that is highly suitable for image recognition and those tasks involving processing of pixel data. Convolutional neural networks (CNNs) are very effective in perceiving the structure of handwritten characters/words in ways that help in automatic extraction of distinct features and make CNN the most suitable approach for solving handwriting recognition problems. Our aim in the proposed work is to deploy the CNN model effectively and produce a good result with better accuracy. The main objective was to actualize a pattern characterization method to perceive the handwritten digits provided in the MINIST dataset of images of handwritten digits (0‐9). Web application is created where the user can upload an image of a handwritten digit. This image is analysed by the model and the detected result is returned on to the UI.