

## PROJECT OBJECTIVES

Date	3 November 2022
Team ID	PNT2022TMID20923
Project Name	A Novel method for Hand Written Digit Recognition

- Using a neural network methodology, build a hand written digit recognizer
- Any random handwritten digit image will be provided as an input to Machine Learning model (CNN), and model should be able to correctly identify the digit
- The aim is to Successfully implement neural network to make a digit recognizer with high accuracy. The idea is to take a large number of handwritten digits and to recognise it properly.
- The idea is to take a large number of handwritten digits, known as training examples, and then develop a system which can learn from those training examples. In other words, the neural network uses the examples to automatically infer rules for recognizing hand written digit
- 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 analysed by the model detected