

Project Design Phase-I

Proposed Solution Template

Date	24/09/2022
Team ID	PNT2022TMID08118
Project Name	A Novel Method For Handwritten Digit Recognition System
Maximum Marks	

Proposed solution:

The main objective of this project is to convert handwritten digits into machine readable formats and make banking operations, vehicle number detection, form data entry easier and error free.

S.No	Parameter	Description
1	Problem statement (problem to be solved)	The problem is machines cannot recognize handwritten digits because handwritten digits can be made with different shapes, size and forms. Handwritten digit recognition system can tackle this problem.
2	Idea / Solution description	Using MNIST dataset over the neural network algorithms, it is possible to recognize the digits which is useful for banks sectors, data entry etc.
3	Novelty / Uniqueness	Using Convolutional Neural Network(CNN) gives greater accuracy and it can detect automatically without any human supervision.
4	Social Impact / Customer Satisfaction	Greater satisfaction by matching the percentage of digits and accuracy recognition without delay , as artificial intelligence reduce the human effort.
5	Business Model (financial Benefit)	Collaboration with bank sectors, government sectors like RTO which is used for detecting cheque, vehicle number detection etc.
6	Scalability of Solution	The handwriting will be detected by any of the formats such as image, documents , etc.. so that it can be user friendly and flexible where there will be a growth for the users.