Ideation Phase
Literature survey

Date	29 August 2022
Team ID	PNT2022TMID38424
Project Name	A Novel Method for Handwritten Digit Recognition System

Survey No . 1

Title : Handwritten Digit Recognition using CNN

Author : Vijayalaxmi R , Rudraswamimath, Bhavanishankar.K

Abstract : The user can either upload the image of the digit he wants to detect or the data from the MNIST dataset. The input images are pre-processed. Using the different classifiers the recognized digits' accuracy is compared and the result is obtained. The results obtained are displayed along with the accuracy.

Survey No . 2

Title : An overview of Handwriting Recognition

Author : Hoomayoon S.M. Beigi

Abstract : This paper presents a comprehensive review of Handwritten Character Recognition (HCR) in English language. The handwritten character recognition has been applied in variety of applications like Banking sectors, Health care industries and many such organizations where handwritten documents are dealt with. Handwritten Character Recognition is the process of conversion of handwritten text into machine readable form. For handwritten characters there are difficulties like it differs from one writer to another, even when same person writes same character there is difference in shape, size and position of character. Latest research in this area has used different types of method, classifiers and features to reduce the complexity of recognizing handwritten text

Survey No . 3

Title : **Recognition of Hand written and printed Text of Cursive writing utilizing optical character recognition**

Author : **Sudharsan Duth P, B, Amulya**

Abstract : This paper presents a comprehensive review of Handwritten Character Recognition (HCR) in English language.The handwritten character recognition has been applied in variety of applications like Banking sectors, Health care industries and many such organizations where handwritten documents are dealt with. Handwritten Character Recognition is the process of conversion of handwritten text into machine readable form. For handwritten characters there are difficulties like it differs from one writer to another, even when same person writes same character there is difference in shape, size and position of character. Latest research in this area has used different types of method, classifiers and features to reduce the complexity of recognizing handwritten text

Survey No . 4

Title : **A Machine Learning and Deep Learning Approach for Recognizing Handwritten Digits**

Author : **Ayushi Sharma, Harshit Bhardwaj, Arpit Bhardwaj, Aditi Sakalle, Divya Acharya, Wubshet Ibrahim**

Abstract : Optical character recognition (OCR) can be a subcategory of graphic design that involves extracting text from images or scanned documents.The Machine Learning and Depp Learning algorithms are used in this project to measure the accuracy of handwritten displays of letters and numbers

Survey No . 5

Title : Handwritten Digit Recognition

Author : E. Lavanya

Abstract : A model of the convolution neural network is developed and analyzed for appropriate totally different learning parameters to optimize recognition accuracy and interval. we have a tendency to propose to research variants of CNN design with 3 layers (CNN_3L) and variants of CNN design with four layers (CNN_4L). a complete of six cases (case one to case 6) are thought of for CNN with three-layer design .