Handwritten Digit Recognition

Team Members :

- Shyam Gopal (210419205044)
- Kishore Kumar L (210419205020)
- Moniessh P (210419205028)
- Tarun K (210419205053)

Department of IT,
Chennai Institute of Technology.

Mentor:

Preethiya T,
Professor ,
Department of IT,
Chennai Institute of Technology.

Abstract:

Handwritten character recognition is one of the practically important issues in pattern

recognition applications. The applications of digit recognition includes in postal mail sorting,

bank check processing, form data entry, etc. The heart of the problem lies within the ability to

develop an efficient algorithm that can recognize hand written digits and which is submitted by

users by the way of a scanner, tablet, and other digital devices.

Objective:

- To ensure effective and reliable approaches for recognition of handwritten digits and make banking operations easier and error free..
- To make the recognition system user friendly and simple.

Literature survey:

S.No.	Author	Paper title	Journal / Conference Title	Page No. & Volume No.	Year of Publication	
1.	Bhatia Neetu	Optical Character Recognition Techniques	International Journal of Advanced Research in Computer Science and Software Engineering	Volume 4, Issue 5	May 2014	
2.	M. Hanmandlu, O.V. Ramana Murthy	Fuzzy model based recognition of handwritten numerals	pattern recognition	vol.40, pp.1840-1854	2007	
3.	Nafiz Arica, and Fatos T. Yarman-Vural	Optical Character Recognition for Cursive Handwriting	IEEE Transactions on Pattern Analysis and Machine Intelligence	vol.24, no.6, pp. 801-113	June 2002	
4.	Anita Pal & Dayashankar Singh	Handwritten English Character Recognition Using Neural Network	International Journal of Computer Science & Communication	Vol. 1, No. 2, pp. 141-144	July-December 2010	

Drawbacks of existing system:

- The main disadvantage is that there is no possibility of obtaining information about the type of the input. First, the text has to be separated into characters or digits.
- There's a wide range of handwriting – good and bad. This makes it tricky for programmers to provide enough examples of how every character might look.The importance of trust has been highlighted future research studies can focus on the antecedents of trust Users require lower level of trust.

Problem Statement:

The aim of a handwriting digit recognition system is to convert handwritten digits into machine readable formats. The main objective of this work is to ensure effective and reliable approaches for recognition of handwritten digits and make banking operations easier and error free.

Proposed System:

The proposed system consists of mainly two parts the first part takes place in the front end where the user interacts with the system and uploads picture of their handwritten digit. Then where the handwritten digit is recognised by the model.