LITERATURE SURVEY ON NOVEL METHOD FOR DIGIT RECOGNITION SYSTEM

ABSTRACT:

Handwriting recognition has acquired a ton of consideration in the field of pattern recognition and AI because of its application in different fields. Despite the fact that, adequate examinations and papers portrays the procedures for changing over literary substance from a paper record into machine meaningful structure. Before long, character acknowledgment framework could act as a critical variable to establish a paperless climate by digitizing and handling existing paper records. This presents a definite survey in the field of Transcribed Digit Acknowledgment. The transcribed digit acknowledgment is the capacity of PC applications to perceive the human digits. This framework is an approach to tackle this issue which utilizes the picture of a digit and perceives the digit present in the picture.

The goal of our work is to create a model that will be able to recognize and classify the handwritten digits .Though the goal of our research is to create a model for digits, words recognition and classification of an individual's handwriting. With high accuracy rates, the model can solve a lot of real-life problems.

INTRODUCTION:

Character recognition is an essential, however most challenging in the field of pattern detection with enormous number of helpful applications. It has been a serious field of exploration since the beginning of software engineering because of it being a characteristic method of interaction among PCs and people. All Character acknowledgment is the method involved with distinguishing and perceiving characters from the information input image and converts it into ASCII or other comparable machine editable structure [1][2].

The procedure by which a computer system can detect characters and different symbols composed by hand in natural handwriting is called handwritten

recognition framework. This is grouped into offline handwriting recognition and online handwriting recognition[3]. On the off chance if handwriting is scanned and, comprehended by the PC, it is called offline handwritten acknowledgment and while composing through touch cushion utilizing pointer pen, it is called online handwritten character recognition. According to the classifier point of view, character acknowledgment frameworks are arranged into two fundamental classifications for example segmentation free (worldwide) and segmentation based (insightful). The segmentation free otherwise called the holistic approach to recognize the character without segmenting it into subunits or characters. Each word is addressed as a bunch of worldwide elements, for example ascender, loops, cusp, and etc. While division based approach [4]; each word/ligature is sectioned into subunits either uniform or non-uniform and subunits are thought about independently.

Manually written character handling frameworks are domain and application specific, similar to it is preposterous to design a plan for generic framework which can deal with a wide range of transcribed contents and language. Heaps of work has been finished on European dialects and Arabic (Urdu) language. While domestic dialects like Hindi, Punjabi, Bangla, Tamil, Gujarati and so on are extremely less explored because of less frequent use.

REFERENCES:

[1] Kai Ding, Zhibin Liu, Lianwen Jin, Xinghua Zhu, “A Comparative study of GABOR feature and gradient feature for handwritten chinese character recognition”, International Conference on Wavelet Analysis and Pattern Recognition, pp. 1182-1186, Beijing, China, 2-4 Nov. 2007.

[2] Pranob K Charles, V.Harish, M.Swathi, CH. Deepthi, "A Review on the Various Techniques used for Optical Character Recognition", International Journal of Engineering Research and Applications, Vol. 2, Issue 1, pp. 659-662, Jan-Feb 2012.

[3] Bhatia Neetu, “Optical Character Recognition Techniques”, International Journal of Advanced Research in Computer Science and Software Engineering, Volume 4, Issue 5, May 2014.

[4] Liana M. Lorigo and Venu Govindaraju, “Offline Arabic Handwriting Recognition: A Survey”, IEEE Transactions on Pattern Analysis and Machine Intelligence, Volume 28 Issue 5, May 2006.