

NAME:RITIKA MAINI

HANDWRITTEN-DIGIT-RECOGNITION

(Week 1 Task)

Literature Survey:

Prepare below table after reading and analysing IEEE Papers:

Sr. No	Title of Paper	Name of Authors	Published Year	Remarks
1`	Bangla Handwritten Digit Recognition Using an Improved Deep Convolutional Neural Network Architecture	Chandrika Saha, Rahat Hossain Faisal Md. Mostafijur Rahman	2019	Methodology: A seven layered D-CNN model is proposed in this paper for Bangla handwritten isolated digits, which provides up to 99.9% accuracy on training data and 97.6% accuracy on test data. Advantage: Deep Convolutional Neural Network has recently gained popularity because of its improved performance over the typical machine learning algorithms. Support Vector Machine
2	Capsule-Based Persian/Arabic Robust Handwritten Digit Recognition Using EM Routing	Ali Ghofrani Rahil Mahdian Toroghi	2019	Methodology: For the first time, capsule network was employed and trained using EM algorithm. Advantage: CapsNet overcomes these shortcomings and provide local translation invariance (via max-pooling, typically) by addressing various kinds of visual stimulus and encoding things such as position, orientation, deformation, and so on. Disadvantage: Having slow convergence.
3	Mobile Client-Server Approach for Handwriting Digit Recognition	Hasbi Ash Shiddieqy Trio Adiono Infall Syafalni	2019	Methodology: Client-server system: The client-server system included a user interface in mobile client and executing the function from input in the server computer system. Most of the application will run in server and small quantities data will be passed between mobile user to the server. Advantages: highly scalable, easy to integrate, low cost,reduce power time. Disadvantages: eliminate the ability to run offline, concern in data privacy and protection, the cost for service managing servers
4	A Robust End-to-End System to Solve the Handwritten Digit String Recognition Problem in Real Complex Scenarios	Byron Leite Dantas Bezerra	2020	Methodology: In this paper, we have presented a new Gated-CNN-BGRU architecture, based on Handwritten Text Recognition (HTR) workflow, for Handwritten Digit String Recognition (HDSR) systems, with focus on improving the state-of-the-art recognition rate of this research field. Beijing Method,Otsu's Binarization.

5	Handwritten Digit Recognition Using CNN	Mayank Jain Gagandeep Kaur Muhammad Parvez Quamar	2021	Methodology: CNN(Deep Learning),MNIST Dataset Advantages: Automatic Extraction of distinct features
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