Literature Survey: Prepare below table after reading and analysing IEEE Papers:

Sl. No	Title of Paper	Name of Authors	Published Year	Remarks
1.	Bangla Handwritten digit recognition using improved deep convolutional neural network Architecture.	1. Chandrika saha. 2. Rahat Hossain Faisal. 3. MD Mostafjur Rahman.	2019	Advantage :- D-CNN on relatively large dataset can increase the recognition accuracy for Bangla alphabet. Applications:- 1. E-sparse representation classifier based method. 2. study was proposed by Hassan et al.where they used Local Binary Pattern (LBP) as feature descriptor and K-NearestNeighbor (KNN) algorithm for classification. 3. Alom et al. has developed a five layered DCNN based architecture for Bangla digit recognition.
2.	Capsule-Based Persian/Arabic Robust Handwritten Digit Recognition Using EM Routing.	1. Ali Ghofrani. 2. Rahil Mahdian Toroghi.	2019	1. Persian/Arabic language, was addressed. 2. capsule network was employed and trained using EM algorithm. 3. Its does not folllow MSINT. 4. The data in our study is provided from Hoda dataset which contains handwritten Persian/Arabic images, which contains 60000 training-data, as well as 20000 test-data samples, in grayscale with 32 × 32 bits resolution. For cross-validation, 5000 data samples is considered for each epoch.

3.	Mobile Client- Server Approach for Handwriting Digit Recognition.	1. Hasbi Ash Shiddieqy. 2. Trio Adiono. 3. Infall Syafalni.	2019	➡ The client-server system included a user interface in mobile client and executing the function from input in the server computer system. **Advantages** :- 1.Low Cost 2. Its is highly scalable. 3.Easy to intigrate. For example:-AWS, Google Cloud,etc **Disadvantages** :- 1. Eliminate the ability to run offline. 2. Concern in data privacy and protections. 3. the cost for service managing servers. ➡ LeNet5 is one of the basic and significant CNN architecture that designed for handwritten recognition. ➡ Gradient-Based Learning Applied to Document Recognition is recently used Deep learning.
4.	A Robust End-to-End System to Solve the Handwritten Digit String Recognition Problem in Real Complex Scenarios.	1. Byron Leite. 2. Dantas Bezerra.	2020	1. The private dataset, named Brazilian Bank Check - Courtesy Amount Recognition (BBC-CAR), has the largest volume of data, composed of 42,443 images in total, where 35,292 are for training and 7,151 for testing. 2. The three best guesses were evaluated (TOP-3), in which we used the three best paths found by CTC's beam search algorithm. **Methodology**:-To compose the methods and models of the experiment, we used the same protocol presented at the ICFHR 2014 competition on HDSR.. Besides, the models most recently presented in the state-of-the-art in HDSR, and the stateof-the-art optical models in HTR were compared with our proposed optical model.

5.	Handwritten Digit Recognition Using CNN.	1. Mayank Jain. 2. Gagandeep Kaur. 3. Harshit Gupta. 4. Muhammad Parvez Quamar.	2021	1. Neural Network has an incredible execution in information arrangement. The fundamental target of this paper is to give effective and solid procedures to acknowledgment of transcribed numerical by looking at different existing arrangement models. 2. This paper thinks about the exhibition of Convolutional Neural Network (CCN). Results demonstrate that CNN classifier beat over Neural Network with critical improved computational effectiveness without relinquishing execution. 3. In this work, with the point of improving the exhibition of transcribed digit acknowledgment, we assessed variations of a convolutional neural organization to keep away from complex pre-preparing, exorbitant component extraction and a perplexing troupe (classifier blend) approach of a conventional acknowledgment framework. 4. Transcribed acknowledgment (HWR) is the capacity of a PC to get and comprehend understandable manually written contribution from sources, for example, paper archives, client input contact screens and different gadgets. 5. Multi-segment DNN (MCDNN) utilized MNIST digits. The outcome has a low 0.23% blunder rate. Hayder M. Albeahdili et al. have played out another CNN engineering which accomplishes cutting edge arrangement results on the distinctive test benchmarks. The blunder rate for this methodology is 0.39 % for MNIST dataset.