A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

LITERATURE SURVEY:

S.NO	TITLE	MODEL / TECHNIQUESUSED	MERITS/ DEMERITS	OUTCOMES
1.	Rohan Sethi, lla Kaushik(2020), "Handwritten Digit Recognition Using Machine Learning" , Institute Of Electricaland Electronics Engineers.	K Nearest Neighbour algorithm	**DEMERITS:** With large data, the prediction stage might be slow. Require high memory – need to store all of the training data.	To demonstrate and represent the work which is related to hand-written digit recognition. The vertical and horizontal projections methods are used for the purpose of segmentation in the proposed work.
2.	Kh Tohidul Islam, Ghulam Mujtaba, Dr. RamGopal Raj, Henry Friday Nweke(2017),"Handwritten Digits Recognition with Artificial Neural Network" ,Institute Of Electrical and Electronics Engineers.	Artificial Neural Network(ANN) algorithm	**DEMERITS** They have used digit images pixels as features vector and ANN as classifiers for handwritten digits recognition.	A multi-layer fully connected neural network with one hidden layer for handwritten digits recognition is implemented.

3.	Eva Tuba and Nebojsa Bacanin(2015), "An Algorithm for Handwritten Digit Recognition.Using Projection Histograms and SVM Classifier", Institute Of Electrical and Electronics Engineers.	Support vector machine and projection histograms method	**DEMERITS** Long training time for large datasets.Difficult to understand and interpret the final model, variable weights and individual impact.	Classification isfacilitated by carefully tuned 45 support vector machines (SVM) using One Against One strategy. The proposed model was tested on standard benchmark images from MNIST database and it achieved remarkable global accuracy of 99.05%