LITERATURE SURVEY :

A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

Yang Zong-chang (2005 – 2013) :

- An artificial neural network (ANN), also called a neural network, is a widely used mathematical model composed of an interconnected group of simple artificial neurons that also called nodes, neuroses, processing elements or units, are connected together to form a network with mimicking a biological neural network.

- Artificial neural network (ANN) uses a connectionist approach to computation in processing information, and is used with algorithms designed to change the strength of the connections in the network to yield a desired signal flow

- Artificial neural network is widely used to model complex relationships between its inputs and outputs, and complex global behavior can be determined by the connections between its processing elements and element parameters in the network.

Selvi, P.P.; Meyyappan, T., (21-22 Feb. 2013)

- Pattern recognition has become a massive important due to ever demanding need of machine learning and artificial intelligence in practical problems.

- Recognition digits covers many applications such as office automation, check verification, postal address reading and printed postal codes and data entry applications are few applications.

- Deep learning (DL) is a hierarchical structure network which through simulates the human brain's structure to extract the internal and external input data's features . Deep learning based on algorithms using multilayer network such as deep neural networks, convolutional deep neural networks.

- Auto encoders is an artificial neural network used for learning efficient encoding where the input layer have the same number of the output layer where the hidden layer has a smaller size. In the auto encoder, the hidden layer gives a better representation of the input than the original raw input, and the hidden layer is always the compression of the input data which is the important features of the input.

REFERENCE :

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- Budiwati, S.D.; Haryatno, J.; Dharma, E.M., (17-19 July 2011) Japanese character (Kana) pattern recognition application using neural network, Electrical Engineering and Informatics (ICEEI), 2011 International Conference on , vo, no., pp.1,6 17-19.