

# Information, Analysis Ximmingning Four Neurons Chemical Name of the Information in Intellectual Evidence



Muminov Bahodir, Sabirov Bahrombek

**Annotation:** The purpose of the research is to extract images from the experimental database by computing the aggregate indicators and introduce them in the parallel processing of models. At present, we have been trying to explain the process of decision-making in algebra of widespread errors and counterfeiting nets in the Ximming network. When deciding whether algorithms in these models are heterogeneous, it does not allow for adequate mathematical formulation of neural networks' transparency problem. As a result, isolation of the images depends on the specialist in neurosurgeons and, in principle, the recommendation.

**Keywords:** algorithm, model, evaluation, image, information, network, memory.

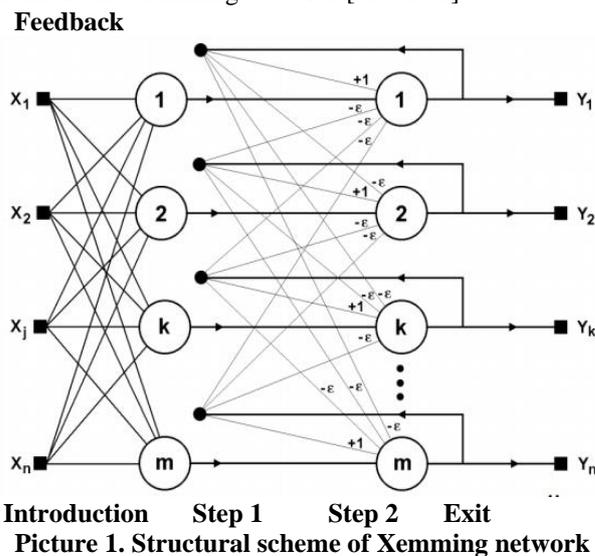
## I. INTRODUCTION

Nowadays, theoretical research and practical use of artificial neural networks and parallel processing of issues are rapidly developing. Neuron nets do not have an analytical description and can only solve large-scale practical issues with experimental data.

The most widespread neural network models with multidimensional nonlinear optimization using the traditional orthographic gradient algorithms are the class of multilayer artificial neural networks. It is well-known that in the study of multilayer artificial neural networks, iterative algorithms approach, the size of the test (choice), the starting value of weight, as well as maximum errors in learning (quality criteria of learning), the number of repetitions in learning (the extent of learning time). Therefore, in the selection of optimal models for solving the problem in the research, it is necessary to develop a set of private and common criteria that will allow them to compare and evaluate the characteristics of neurosurgeons in decision-making.

## II. TYPES OF COMMUNICATION SYSTEMS

The principles of classification among Sunni neural network concepts do not correspond to the principles of independent and non-exclusive learning. In these cases, the weight coefficients are sought using the information that is being processed and all the tests are made in the same manner. On the one hand, apricot information should be regarded as anonymous learning aids, while on the other hand, the network stores images until it comes to real information. Ximming nets are well known in these logical connections. If the network breaks the exact number of the form, then the associative memory is well-suited to the XYSM network. The following figure shows the structural scheme of the Hemming Network [Picture 1].



The network consists of two satellites. The first and second layers consist of neurons, where the number of forms. Neurons in the first layer consist of synapses associated with  $n$  networking. Neurons in the second layer are associated with synapses that are in contact with the opposite. The only positive feedback is coupled with its neurons.

The purpose of a network work is to find the cache between the images being tested by all the images. The distance from the Ximming is the difference in bits of these two binary vectors. The network model selects the minimum distance of Ximming between the sample and the missing images and, as a result, a neuron that corresponds to this image becomes active.

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Assessing the weight coefficient for the first layer and evaluating the activating function is as follows:

$$w_{ik} = \frac{x_i^k}{2}, i = 0 \dots n - 1, k = 0 \dots m - 1 \quad (1)$$

$$T_k = \frac{n}{2}, k = 0 \dots m - 1 \quad (2)$$

Here is a  $x_i^k$  -k- shape i-element

Synapse overlay coefficients receive a value of  $0 < \varepsilon < 1/m$  on the second layer. The neural synapse associated with an ankle +1 has the weight.

1. In the first layer of the network, the value and the vector  $X = \{x_i: i = 0 \dots n - 1\}$ , (which represents the upper index layer number) are taken into consideration when considering the value of the first layer:

$$y_j^{(1)} = s_j^{(1)} = \sum_{i=0}^{n-1} w_{ij} x_i = T_j, j = 0 \dots M - 1 \quad (3)$$

After that, the axis of the second layer are:

$$y_j^{(2)} = y_j^{(1)}, j = 0 \dots M - 1 \quad (4)$$

2. The new state of the second layer is:

$$s_j^{(2)}(p+1) = y_j(p) - \varepsilon \sum_{k=0}^{m-1} y_k^{(2)}(p), k \neq j, j = 0 \dots m - 1 \quad (5)$$

and its value:

$$y_j^{(2)}(p+1) = f[s_j^{(2)}(p+1)], j = 0 \dots m - 1 \quad (6)$$

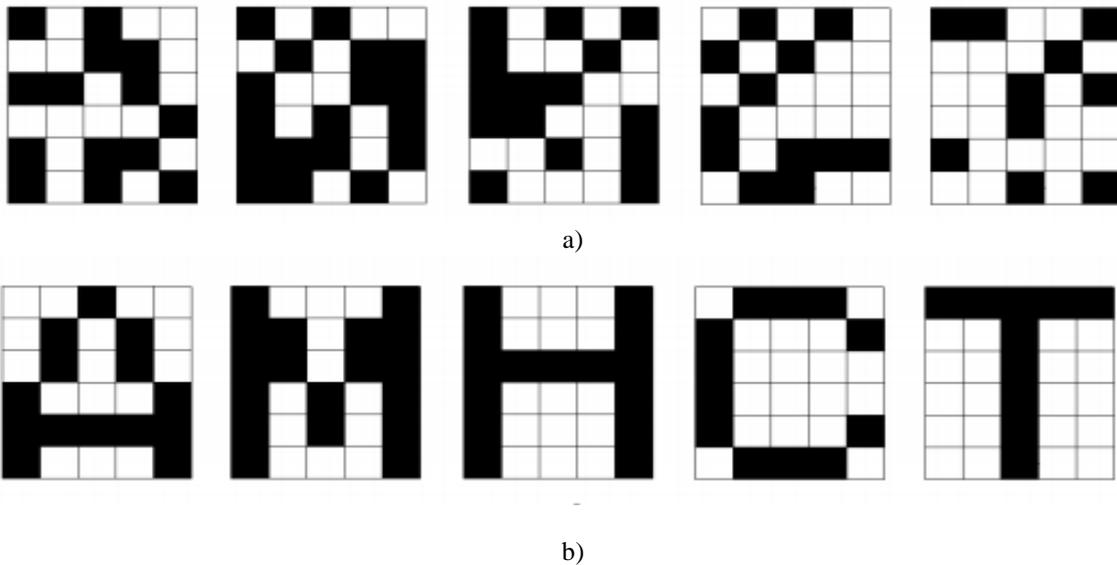
The value of the activator f (Picture 2. b) is apparent, where F is sufficiently large and does not exceed the value of an arbitrary argument.

3. The last iterator is checked whether the value of the second layer varies, if yes, then step 2, otherwise the cycle is stopped.

As the evaluation of the algorithm shows, the first layer remains of a conventional significance: In the first step, the values of the weight coefficients are used once, so the first layer is removed from the network as shown below.

The Xemming Network programming model is based on the selection of special classes.

The NetHN class has the following elements:



Picture 2. Exemplary and tested forms.

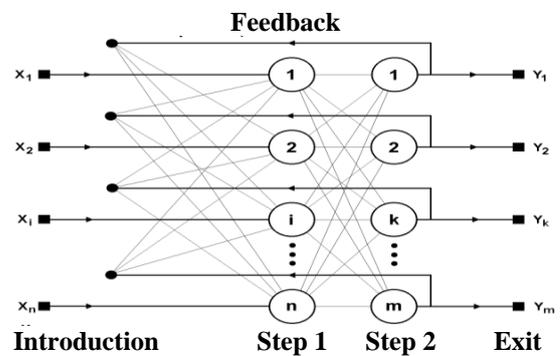
$N_{in}$  and  $N_{out}$  - the number of shapes and sizes of unwanted vectors in accordance with the data;

$dx$  and  $dy$  - dimensions of unwanted forms by two coordinates,  $dx * dy =$  These functions are used to input data from the LoadNextPattern file;

Here, the second layer is used to identify five letters.

3. Two-way associative memory

The program was tested in Borland C ++ 6 environment. The offered classes are more appropriate for the larger Ximming networks. The IYX network is a logical continuation of the Hopfil network, adding a second layer for it.



Picture 3. Structural scheme of two-way associative memory (IYAX).

The IXA structure is shown in Figure 3. The network has the ability to preserve pairs of associative forms. Let's suppose double forms  $X^k = \{x_i^k: i = 0 \dots n - 1\}$  and  $Y^k = \{y_j^k: j = 0 \dots n - 1\}$ . Let's look at the vector,  $k = 0 \dots r - 1$ , where r is the number of pairs. The input of the vector into the network, for example,  $P = \{p_i: i = 0 \dots n - 1\}$  in the second layer, the other  $Q = \{q_j: j = 0 \dots m - 1\}$  vector is formed and again enters the first layer.

The two vector pairs in each cycle also approach the exemplary pair forms, whereas the first X corresponds to the input P and the second to the associative Y. The association between the vectors in the first layer is expressed by the weight matrix  $w^{(1)}$ . The weight matrix  $w^{(2)}$  in the second layer is equal to the transpiration of the first matrix  $(w^{(1)})^T$ . Network training is done by calculating the following W matrix elements, as in the network of Hopfield:

$$w_{ij} = \sum_k x_i y_j, i = 0 \dots n - 1, j = 0 \dots m - 1 \quad (7)$$

This formula is an extended view of the matrix equation below

$$w = \sum_k x^T y \quad (8)$$

In particular, when the forms are written in vector format, the magnitudes of multiplication of matrices are respectively  $[n * 1]$  and  $[1 * m]$  and formulas (7).

### III. RESULT

The small size of the network, not only images, but also their generalization, for example, the Hemming network is based on maximum emission standards [3].

The use of neural networks is carried out in two stages:

- 1) Neural Architecture Selection.
- 2) Selecting weight coefficients of neural networks.

In the first step, you will need to select the following:

- a) Which neurons do we use (number of entries, activation function);
- b) How to link them;
- c) What to do in order to enter and exit the neural network.

In the second step, you will need to "train" the selected neural network, so you need to find a weight coefficient for it to work.

### IV. CONCLUSION

In summary, Hopfield and Jimmy IYAX carry out an effective and simple restoration of non-widespread and corrupted images and have advantages over the range of differentiated, quantitative and nominal domains in the neural network. The method of the Hopfield method is applied and the information obtained is described in the model of uncertain logic.

### APPENDIX

It is optional. Appendixes, if needed, appear before the acknowledgment.

### ACKNOWLEDGMENT

It is optional. The preferred spelling of the word "acknowledgment" in American English is without an "e"

after the "g." Use the singular heading even if you have many acknowledgments. Avoid expressions such as "One of us (S.B.A.) would like to thank ... ." Instead, write "F. A. Author thanks" Sponsor and financial support acknowledgments are placed in the unnumbered footnote on the first page.

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