



INTELLIGENT MODELS FOR PREDICTING AND CLASSIFYING THE BIO ENERGY OF HUMAN BODY

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Abstract

Physical and mental health are the major issues to adapt with the busy life style of human beings. The chemical reactions of the human body is related to the chakras and auras. The chakras helps to control the bio energy signals of the body internally, while the auras are generated around the physical body of human. The human body has energy sources, which will generate bio energy signals to maintain the regularity of internal organs. Recently, costly instruments have been used to measure values of chakra and aura colours, but they are not useful to measure accurately. Hence the intelligent based system is proposed for associating psychological symptoms with chakra or aura levels. The proposed models can predict the strength of chakras and auras using the Machine learning algorithms like Back-propagation Neural Networks and Self Organizing Maps without using the costly equipment. The proposed expert systems can provide the counselling to the needy people.

Keywords: Machine learning, Chakras, Aura signals, Neural Networks

I Introduction

Today, human is living in digital world with more tension and stress. The technologies are growing in the form of digital data, Mobiles, Cloud data, IoT and WoT etc, while the ethics of human is gradually reducing. The many is facing a lot of problems in offices and home. The human needs the courage to meet the challenges in everyday life. If the human understands the nature of life, he is able to solve the problems easily. Along with quality food, the social relationship has more impact in maintain the physical and mental health. The energy signals

are generated through chakras of human. There are seven major chakras in the form of gateways in the human body for supplying sufficient energies to the minor chakras. Around each major chakra, there are many minor chakras in the body to control the regularity of enzyme generation of important glands. Some costly tools like Interactive Aura Video), Semyon Kirlian are available in the market to measure the bio-signals roughly. But that measurement is not correlated with the actual values. Hence the proposed intelligent based models uses machine learning techniques to predict or classify the bio signals of human body. The study was done on the comparison of human body Electromagnetic radiation [Mastura Rosdi et. al.].

The machine learning is a part of artificial intelligence has major role in classifying the patterns. S. B. Kotsiantis mentioned that Machine learning algorithm, is able to identify the relationship among the features of Non-linear problem. The supervised strategy of machine learning like BPN (Back propagation Neural Network) is able to predict the output from the non-linear input space. The input pattern of human behavior is constructed from the physiological characteristics of human to predict the bio signals of chakras using BPN. Pranjal Awasthmi et al. noted that clustering is an unsupervised learning strategy used to partition the data given in group-wise by identifying the similarity information within the cluster and dissimilarity information among the different clusters. Teuvo Kohonen specified that the self-organizing map (SOM) is an automatic data-clustering method, used in extracting the relevant features of data mining problems. Hence the SOM is proposed to classify the various colors of Aura signals of human in this work. The outcome of these proposed models can help man

to identify whether the chakras are balanced or not. And it provides counseling to the persons to follow meditation or physical exercise for improving the bio energy.

II. About Chakras

The network of chakras circulates the energy signals throughout the body. It plays an important role in the healthy life of human.[Russ Curtis et al]. Chakras receive and transmit energy which will be translated into physical , emotional and Psychic energy. There are seven chakras in human body as given below:

1. Muladhara Chakra (Root Chakra)

It is major interface to communicate with the external world. From this center, the signals are generated to maintain the survival of human in the surrounding environment. The balanced chakra can bring the peaceful mind. The color is red and located at the base of spine. It is related to the mental and emotional issue. It generates energy in 256 Hz for the functionality of spinal column, kidneys, legs, feet, rectum and immune system. We can the energy signals of earth through this chakra. The strength of signals of this chakra is similar to earth

2. Svadhisthana Chakra (Sacral chakra)

It is in orange color. It generates energy in 288 Hz . It generates energy upto 288Hz for the functionality of kidneys , bladder , sexual organs and reproductive systems. It relates with the emotional effects such as feelings , self awareness , self love and creativity. The power of the signals is related with water

3. Manipura Chakra (Solar plexus chackra)

This yellow colored chakra generates energy signals in 320 Hz for the personality , self-respect and self-confidence of the man by simulating the digestive system , skin, small intestine and nervous system, The energy of this chakra is similar to heat energy. The human can get confidence and identity from the power of balanced chakras.

4. Anahata Chakra (Heart Chakra)

At the center of chest of human body, this chakra is located. The signals of this chakra are associated with kindness. It is the heart chakra. The power of this chakra is related with wind energy for the functioning of chest , hands, heart , arms and lungs with 341. 3 Hz.

5. Visuddha Chakra (Throat chakra)

The chakra helps to improve the communication skill of human. It generates energy for controlling the throat, neck, nose, teeth and mouth .The thyroid is the important gland for the metabolism. If this gland

secretes more thyroid hormones then it is a hyperthyroid . If it generates less thyroid , the problems of hypothyroid will occur inside the human body. This blue color chakra is related with the space energy.

6 Anja Chakra(Third Eye / Brow)

It is located between the two eye brows of human like the Third Eye of Lord Siva. The imagination and innovation of human are related with this chakra. It has the major role in determining the life of human. This violet color chakra generates energy with 426.7 Hz frequency .It has major impact in generating all hormones of human body. It is found in the pituitary gland . The diseases of eyes, ears, nervous system, base of skull will be solved using the energy of this chakra. It maintains the Intuition, understanding , Insight and realism.

7. Sahasrara Chakra (Crown chakra)

It is on the top of head with violet colour to top of skull and skin. The major human characteristics related with this chakra are knowing, wholeness, perfection, unity and enlightenment. The connection will be established from the human to the SOURCE through this chakra. It is found in the pineal gland and is associated with body rhythm. It generates signals with 480 Hz.

III . About Auras

The physical body of human has millions of cells and these cells are interconnected by biomagnetic signals. Each cell vibrates energy at low rate. At high rate, also the energy signals are generated around the physical body. The energy signals are permeate through emit or exit from the different layers in different color. Each layer has energy emit or exit from the physical body with different density [R. Rajesh et al]. This kind of energy is called as “Aura” . In the healthy human body, the particles of Aura generates a oval shaped form. This “auric energy” emits out from the body approximately 2-3 feet on all sides. It extends above the head and below the feet into the ground. Each layer of aura is in different color with respect to the characteristics of human. With respect to the characteristics of human, the meaning of colour will be varied as given below:

- Deep Red Aura –Related to hardworking
- Red Aura –Related to sex, victory
- Orange – Related to adventure
- Orange yellow Aura –Related to logical ability
- Yellow Aura – Creative mind
- Green Aura – Indicates socialism
- Deep green Aura –Represents organizing power

- Blue Aura –Represents sensitive mind
- Indigo Aura –Indicates clarity
- Violet Aura – Represents Sensual power
- Lavender Aura – Imaginative thinking
- White Aura –Having spiritual power

-I and Table -II . The values of these input information are mapped as given below:

- 1 = Never / Strongly Disagree
- 2 = Not Often / Disagree
- 3 = Sometimes / Maybe
- 4 = Often / Agree
- 5 = Always / Strongly Agree

IV Pattern construction

The physiological characteristics of human are identified using the information given in Table

Table – I Physiological characteristic for the first four chakras

Muladhara Chakra	Svadhisthana Chakra
1) More interest in seeing Nature	1) Taking all in easy manner
2) Taking regular exercise	2) Having more affection with people
3) Feeling safe in the world	3) Having satisfaction in the life
4) Eating healthy food	4) Enjoying with other people
5) Feeling as grounded person	5) Engaging with hobbies
6) Having self- confidence	6) Comfortable with gender
7) Not worrying about the surrounding	7) Controlling emotions
8) Not applying possessions over the things	8) Spending time by his or her self
9) Being a patient person	9) Very compassionate towards others
10) Facing the problems confidently without fear	10) Feeling comport about the physical body
Manipura Chakra	Anahata Chakra
1) Having a strong sense of personal power	1) Happy person
2) Having a high energy level	2) Making friends easily
3) Has a strong metabolism	3) Liking himself or herself
4) Defining and achieving goals	4) Having good relationships
5) Very confident	5) Having peace in present status
6) Do not let other people make him or her to feel like a victim	6) Able to forgive the mistakes of others
7) Having good self-esteem	7) Not having jealous or possessive
8) Accepting responsibility	8) Having inspiration in the present life
9) Comfortable in facing risks	9) Sympathetic person
10) Praise others freely	10) Self-healing energy

Table – II Physiological characteristic for the last three chakras

Visuddha Chakra	Anja Chakra
1) Able to communicate effectively	1) Comfortable in notifying the surroundings
2) Eager to self-engagement by writing, art, or music	2) Having powerful memories
3) Excellent listener	3) Feeling the experience always
4) More creativity thinking	4) Able to visualize the things clearly
5) Good relation with others	5) Highly imaginative person
6) Feeling more about the family and friends	6) Having trust in opinion
7) Ability to hear all	7) Excellent memory capacity
8) Ability to express everything easily	8) Feeling psychic connections with other people
9) Feeling convenient while communicating with others	9) Feeling experience with others through signals of sensory organs
10) Honest in work	10) Extraordinary looking to see
Sahasrara Chakra	
1) Taking meditation regularly	

2) Clear in thoughts and actions
3) Having spiritual mind always
4) Having more vision
5) Eager to interconnectedness of all things
6) Support with self-thinking
7) More attachment with objectives
8) Having self-reliance in spiritual matters
9) Eager to learn more
10) Courage to meet the challenges

The physiological characteristics of human are identified using the information of Table III, Table IV , Table V and Table VI for the classification of aura colours.

Table – III physiological characteristic of Aura Colours: Red, Orange , Magenta and Yellow

Red Color	Orange Color	Magenta	Yellow
Expressing any information through physical body than emotions	Having more enjoyment to face the challenges	Confidence in behaviour	Enjoying life like playing games
Interested to become like surgeon , athletics trainer, dancer, singer ,actor , boxer, driver , soldier fire-fighter, barber and police man	Wealth to meet the success easily.	Having strange in dress , feelings , emotions and home	Having a great sense of humor and love to laugh.
Having good personality	Prefer to do the physical related activities	Like to meet challenges	Full hope in finding the optimal solutions
Like to show kindness and causality	Able to apply intelligence in planning the activities carefully to provide security	Willing to attend the parties with friends , eager to enjoy with social events	Like to apply creativity in art, watering plants and ordering the things
Comfortable to express sexual feelings.	Having potential to face the physical pain	Enjoy with abnormal situations	Liking nature very much. Willing to get healing from Nature
Easy to temper but switch over to normal situation easily	Like to participate in critical games	Irresponsible for friends and family	Often having knee related pains
Immediately to react to anger	Self-employment support	More comfortable to live in a big city	The carrier related to creativity
Able to discover the root cause of achievement	More excitement In facing abrupt changes in the life	Life style is elaborative and irregular	Shows interest in healing.

Table IV physiological characteristic of Aura: Logical Environmental , Sensitive, Abstract Tan

Logical Tan	Environmental Tan	Sensitive Tan	Abstract Tan
Prefer stable job with regular payment	Analyse the environment with more interest	Like to support the activity , not willing to take major responsibility	Always expected to take job which has all the details

Not emotional and calm in risk	Able to predict the physical parameters like pressure ,length, depth and volume without measuring really	Patient person.	Unable to find the priority of the activities
Hope in evaluating anything with proof	Independent person and having strong mind	Become as patient listener.	Feel lonely and confusion in scheduling the activities
Able to work in all aspects of the work.	Mining the mind about how the heavy vehicles like flight and ship are working	Reserved and shiny	Unable to express the emotions
Working in same concern or Institution for many years.	Preferring stable work with enough payment	Suffered a lot emotionally due to the requirements of others. Always considering the feeling of others	Basically humanity and thinking about the world always
Preferring well defined procedures in doing the activities	Expected to be self-controlled.	Always thinking that attending all the meetings are mandatory	Regularly misplacing the items
Willing to work as architect , doctor , engineer ,lawyer , scientist , executive officer, computer programmer or analyst	Willing to work as telephone repairman , electrician ,map marker ,clerk, farmer or computer operator	More interest to work as assistant in Medical , nurse, teacher for preschool students ,bookkeeper, children care worker, mentor counselor, students advisor, homemaker or service provider	Willing to work tour guide, landscaper, , teacher, designer, consultant, decorator, gardener, health practitioner, or salesperson
Ready to come out of the problem	Ready to accept his or her false statement	Ready to accept the up and down changes of life	Hope to act as Aura Colors trainer.

Table V Physiological characteristic of Aura: Green, Blue, Violet, Lavender

Green	Blue	Violet	Lavender
Want to do the activities with excellent plan and systematic procedure	Environment may flame their emotions but trying to counsel patiently	I have a strong desire to help improve life on the planet.	Hope on imagination rather than the real world.
Own financial support , business achievements and the honour from talent people are the factors to earn a lot of money	Exhibiting kindness towards the people and animals is the major strength in the life	Feel that I am having important information to the people in the world	Basically calm gentle and sensitive
Busy in life	Easy to move tears for the emotions.	Feeling that I will a popular person.	Always forget most of the information

Want to behave like a perfect person	Always having the excitement about the events that not happened till now	Mostly having leadership position	Difficult to follow the imagination
Talking usually quickly	Wealth is not a first priority	Possible to involve in political problems or social service if supported by wealth	Having often chronic health problems
Having digestive or heart problems.	Always trying to fulfil the needs of others rather than my dealing the own problems.	Loving music very much	Interested to have creative pictures in the home
Very interest in working as , sales person ,banker or businessperson and in the organizing the events	Like to work as homemaker, parent, spiritual teacher, astrologer, psychic or animal caretaker.	Happy to work as singer, artist, writer, designer, photographer, teacher, consultant or lecturer	Want to be as storyteller, artist, writer dancer, actor or pre-school teacher

Table VI physiological characteristic of Aura: Crystall , Indigo and Red Overlay

Crystall	Indigo	Red Overlay
Liked to work as librarian, healer, doctor, medical assistant, artist, florist or writer	Not having sexual appearance	Emotional, physical, or mental
Want to do service	Having highly sensitive physical, emotional, and psychological system. Having clear memories of past lives	Not feeling safe in my environment.
	Artificial items are in the second priority . No interest on the new technologies	Life-threatening situation at a young age

V. Intelligent Algorithms

Back Propagation Neural Network (BPN)

The machine learning technique Back propagation technique is a supervised network model where input samples are used with targets for training to learn the correspondence between

the input and outputs. The performance of BPN can be improved using feedback information obtained from the difference between the actual and the desired output [Dr. Rama Kishore et.al]. The network will be trained and validated as given below:

Algorithm : Backpropagation;

Start with randomly chosen weights;

while error is above desired threshold **do**

for each training sample x_p , $1 \leq p \leq P$,

 Compute the outputs of input nodes or inputs of hidden node inputs

$$f(x_i^k) = x_i^k \quad \text{where } i = 1, 2, \dots, n \quad k = \text{pattern index} \quad (1)$$

 Compute hidden node outputs

$$z_h^k = \sum_{i=0}^n w_{ih} f(x_i) \quad \text{where } h = 1, 2, \dots, q \quad (2)$$

Compute inputs to the output nodes

$$f(z_h^k) = \frac{1}{1 + e^{-zh}} \quad (3)$$

Compute the network outputs

$$f(y_j^k) = y_j, \quad \text{Where } j=1 \dots p \quad (4)$$

Compute the error between output and desired output

Update the connections (weights) of hidden and output nodes

$$w_{ij}^{k+1} = w_{ij}^k + \eta \delta_j^k f(z_n^k) \quad (5)$$

η is a learning rate and δ_j^k is a error term

Update the weights between input and hidden nodes

$$w_{ij}^{k+1} = w_{ij}^k + \eta \delta_h^k f(x_i^k) \quad (6)$$

end-for

end-while.

Self Organizing Map (SOM)

SOM is applied in data dimension reduction, clustering, image analysis, and many others. SOM is a unsupervised learning technique, which is able to predict the relevant features without using the target data while training. Brain in complex in nature which receives a lot of inputs from the sensory organs. These signals are mapped to the respective cerebral context of

the brain. [SIMON HAYKIN]. Neurons involved in this area work processing the input information using the synaptic weight connections of the neurons to predict the most relevant features. In conventional SOM, the weights of the winner and its neighbouring neurons are updated regardless of their distance from the input vector [VikasChaudhary-et al.]

Algorithm

Configure the SOM neural network with Initialize the weights of nodes

1. Repeat
2. For each training sample in the input patterns X_i
3. Find the similarity matching and fins the winning neuron i, j
4. $\| X_i - W_{i,j}(k) \| = \min \{ \| X_i - W_{i,j}(k) \| \}$ (7)
5. Adaptation : Update synaptic vectors of ONLY the winning cluster
6. $W_{i,j}(k+1) = W_{i,j}(k) + \alpha(k) (X_i(k) - W_{i,j}(k))$ (8)
7. Where α is a learning rate
8. Update α
9. Until no more observable changes in the map.

VI Results and inferences

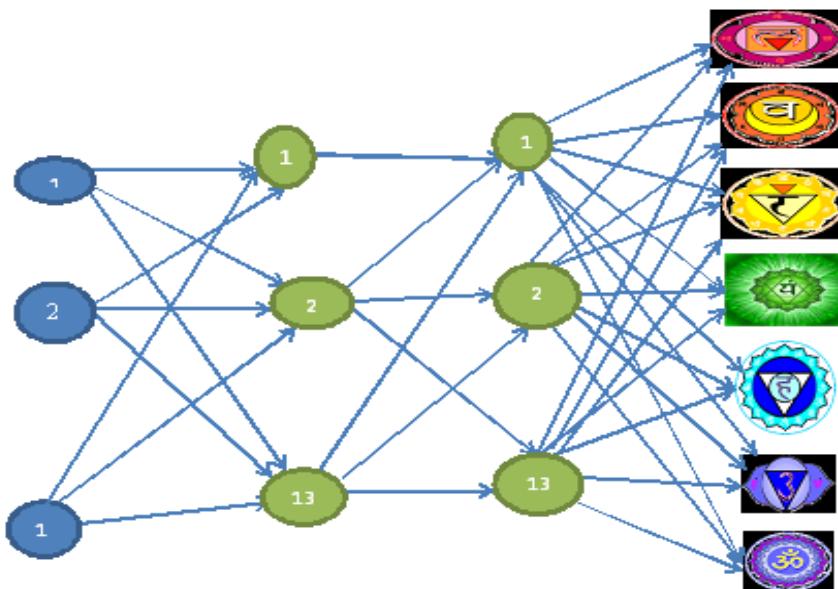
Prediction of chakras

Nearly 100 input patterns were constructed with 10 input nodes (representing the values 1,2,3,4,5) using the physiological characteristics of Table I and Table II and 7 output nodes representing the values of chakras like Muladhara Chakra, Svadhisthana Chakra, Manipura Chakra , Anahata Chakra, Visuddha Chakra, Anja Chakra, Sahasrara Chakra .Hence as per the architecture of BPN given in Figure 1 , the network model is designed with 10 input nodes

,two hidden layer (each has 13 hidden nodes) and 7 output nodes . The BPN is trained with 100 samples at the network convergences after 18 epochs as given in Figure 2. The correlation coefficient R is calculated as 0.99653between the actual network output and the expected outputs as shown in figure 3.Using the trained network , the mean bio energy values of seven chakras are predicted and shown in Table VII. Also the partial patterns of bio energy of individual samples are reported in Table VIII

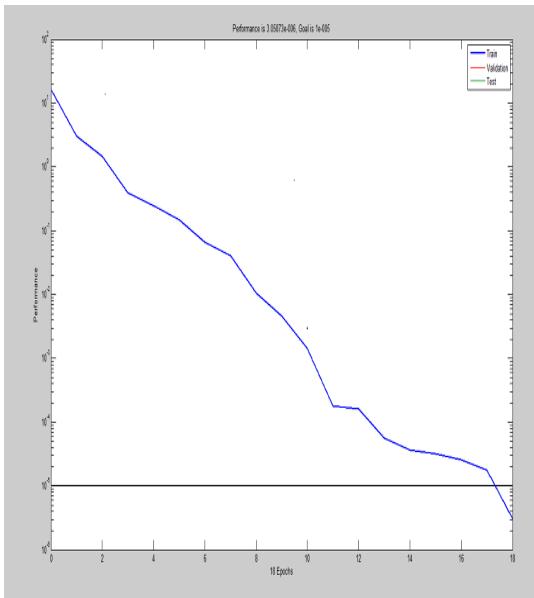
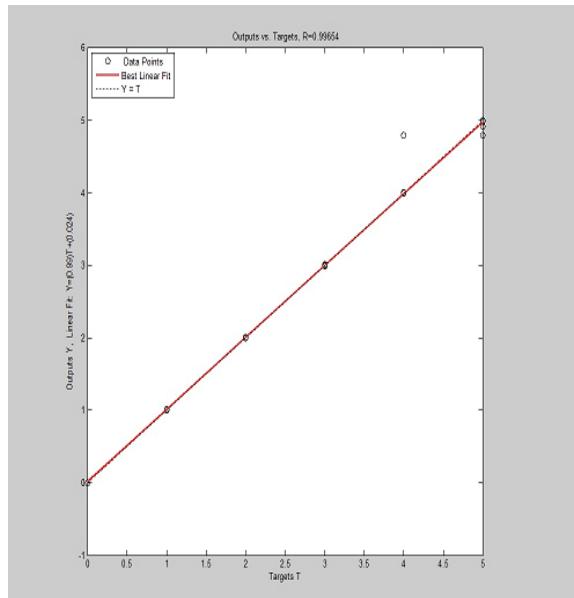
Table VII Mean Bio energy values of seven chakras of human

Chakra Name	Expected Bio Energy	Actual Bio Energy
Muladhara (Root Chakra)	302.0000	301.7033
Svadhisthana (Sacral chakra)	297.0000	296.6802
Manipura (Solar plexus chakra)	292.0000	292.6519
Anahata (Heart Chakra)	301.0000	302.2401
Visuddha (Throat chakra)	293.0000	293.9150
Anja (Third Eye / Brow)	303.0000	303.1452
Sahasrara (Crown chakra)	294.0000	295.6541

**Figure 1 Architecture of BPN to predict Chakras****Table VIII Partial patterns of Individual Bio energy values of seven chakras of human**

Muladhara		Svadhisthana		Manipura		Anahata		Visuddha		Anja		Sahasrara	
Actual	Raw	Actual	Raw	Actual	Raw	Actual	Raw	Actual	Raw	Actual	Raw	Actual	Raw
2.999073	3	2.99913	3	2.999256	3	2.998689	3	1.999506	2	2.999021	3	3.000109	3
3.000124	3	2.00086	2	3.000371	3	2.999949	3	3.000455	3	4.000001	4	3.00083	3
1.99962	2	2.999723	3	2.999586	3	2.999423	3	3.000338	3	3.000288	3	3.0008	3
4.000321	4	4.000317	4	4.000287	4	4.000238	4	4.000295	4	4.00028	4	4.0003	4
3.999977	4	4.000056	4	4.000071	4	4.000213	4	3.999994	4	3.999983	4	3.999965	4
2.999877	3	2.999776	3	2.999814	3	2.999702	3	2.999912	3	2.999956	3	2.999951	3
4.000321	4	4.000317	4	4.000287	4	4.000238	4	4.000295	4	4.00028	4	4.0003	4
3.999977	4	4.000056	4	4.000071	4	4.000213	4	3.999994	4	3.999983	4	3.999965	4
1.001056	1	1.000909	1	1.000889	1	1.00063	1	1.00103	1	1.001058	1	1.001079	1
1.000212	1	1.000207	1	1.000282	1	1.000365	1	1.000288	1	1.000324	1	1.000278	1
2.999073	3	2.99913	3	2.999256	3	2.998689	3	1.999506	2	2.999021	3	3.000109	3
3.000124	3	2.00086	2	3.000371	3	2.999949	3	3.000455	3	4.000001	4	3.00083	3

As per the results of Table VIII, some samples are having variations among the chakras and hence they are notified as unbalanced chakras.

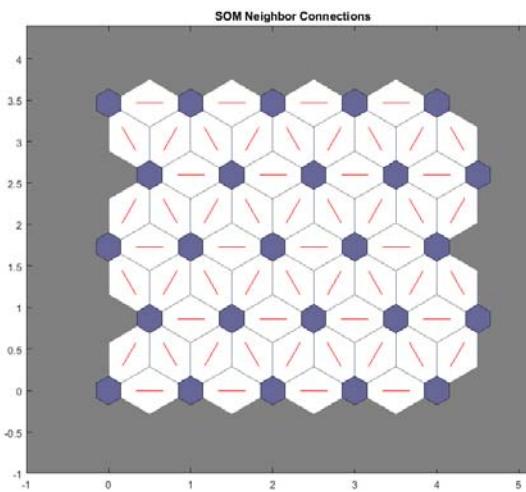
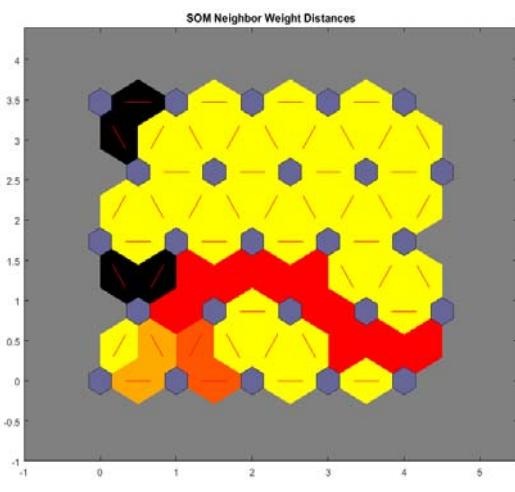
**Figure 2 (a) BPN network convergence****Figure 2(b) Validating BPN network**

Classifying the Aura colours

The training samples were used for a single person with 15 features to represent the Aura colours like Red , Orange , Magenta , Yellow, Logical Tan, Environmental Tan, Sensitive Tan, Abstract Tan, Green, Blue, Violet, Lavender, Crystal ,Indigo and Red Overlay. SOM architecture is formed by 5 x5 neurons as given in Figure 3(a) .The figures 3(b) represents the distance between the neighbours of the neurons and Figure 3(c) weight connections for classifying the input patterns . Finally after training SOM classifies the 15 features into three classifications as shown in Figure 3(d). Red and Logical Tan are under one classification ,

Abstract Tan colour is under a separate class and the remaining colours Orange , Magenta , Yellow, Environmental Tan, Sensitive Tan, Green, Blue, Violet, Lavender, Crystal ,Indigo and Red Overlay are under one class in this case. Hence as per the input given the particular person has more contribution of Red and Logical Tan colours.

In the another case , the input patterns are collected for 100 persons and are mapped into the 10 x 10 lattice as given in Fig.4(a) and their pattern classification is shown in Fig.4(b) and Fig.4(c). The figure 4(d) proves that bio energy of 100 persons are classified into 13 classes.

**Figure 3(a) SOM Topology****Figure 3 (b) Weight distance between the neighbours**

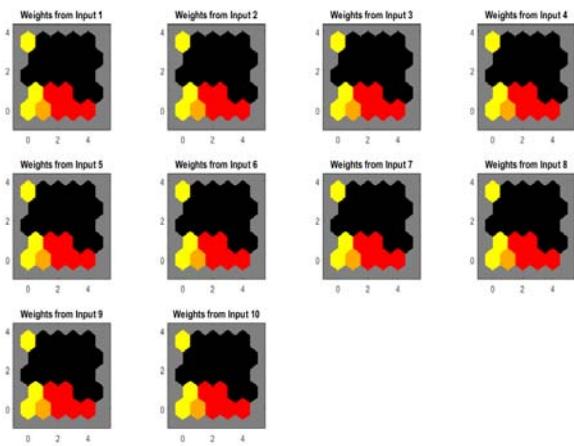


Figure 3(c) Weight changes for input pattern

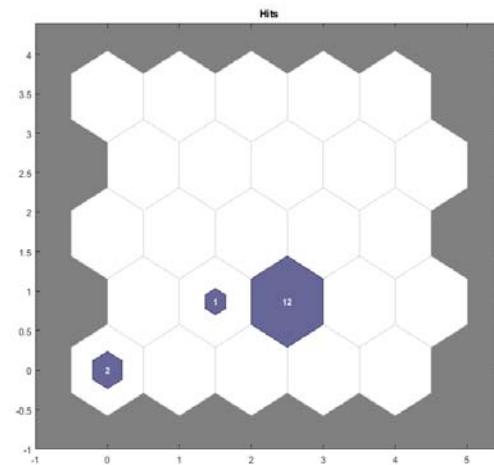


Figure 3(d) Classifying the Aura colors

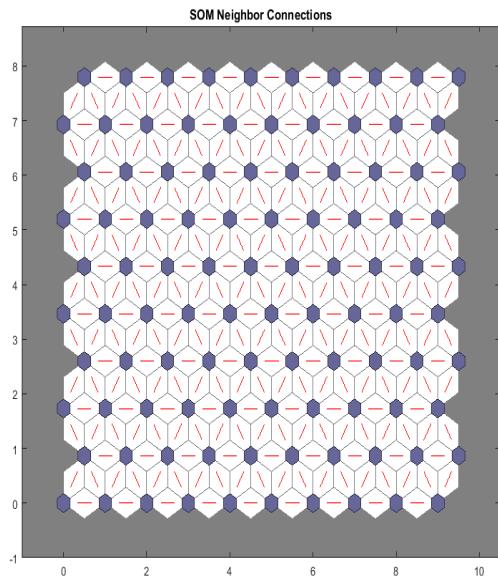


Figure 4(a) SOM Topology

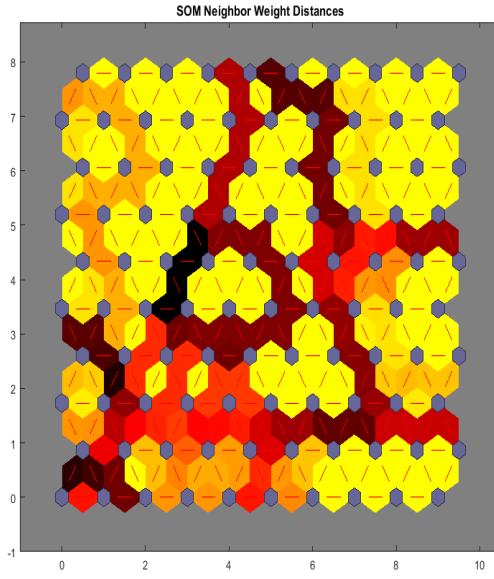
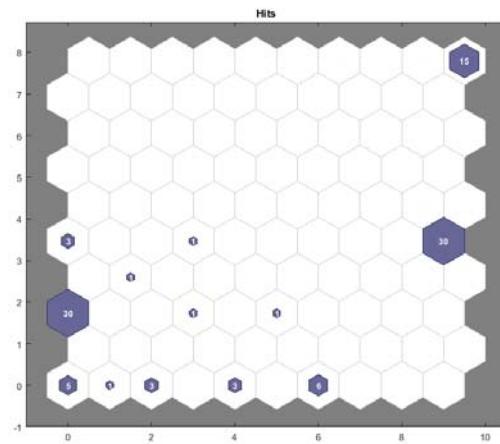
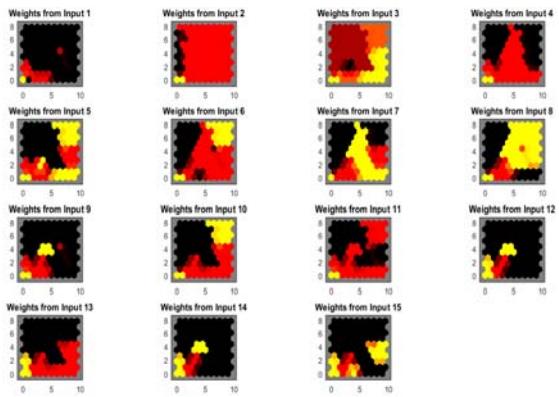


Figure 4(b) Weight distance between the neighbours



Conclusions

The machine learning tools like BPN and SOM are used to predict or classify the bio energy signals of human body without using costly machines. The outcome of these proposed models can help man to identify whether the chakras are balanced or not. And it provides counseling to the persons to follow meditation or physical exercise for improving his or her bio energy.

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