

Design and Development of Machine of Vision Algorithm by empowering Artificial Intelligence using biometric Mentalligence

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Abstract :-Today's technological time, that too in covid-19 pandemic lockdown, teachers are constructing the new digital society through online education. This made the need of the hour to design and develop a machine teacher with the very same human teacher attribute, contributing to the emotional development of the student. This paper proposes a different perspective of blending the Mentalligence with artificial intelligence using human biometrics namely ,tears, sweat, urine and saliva as per the adaptability as a measuring parameter for developing such a machine teacher termed as machine of vision. This machine teacher can be useful in nurturing the human values in students. Any further father machine, mother machine, can replace the missing human and bring happiness in the children in their all-round perfect growth and development. The social democratic personalities can be given rebirth in the machine form and further the artificial intelligence can be moved to imaginative and wonderful journey.

Keywords —*Biometrics, Mentalligence, Machine of Vision, Machine Teacher*

I. INTRODUCTION

The humanoid robots are (going to be) the rulers and this paper aim at bringing the human values in humanoids. The basic innovative thought of the author is described as the human values determined by the mental concepts namely views, thoughts or attitudes, ability and potential of humans can be blended with artificial intelligence may result in machine of vision algorithm. This blending process requires biometric Mentalligence to be stored in the memory and it will empower the artificial intelligence to develop a humanoid machine of vision possessing the values of humanity. The sensor in the machine teacher can read and sense the input of the student and main map with the Mentalligence data base stored in its memory and decision can be selected and implemented by the machine teacher.

II. REVIEW OF LITERATURE

A. Mental Development

The contemporary Indian mental concepts cannot be called entirely Indian because of a significant Western influence..Ancient Indian mental concepts of children and adolescents are very similar to the contemporary modern concepts. Children were wanted and considered precious. The children were categorized in to 4 different varnas based on their intelligence, abilities, merit and aptitude and educated accordingly, away from their home, at Gurukuls. Children's physical and mental development. By Indian, we mean people of, or people living in the Indian sub-continent

since the political map of India has been changing with time. In the present times, this would mean several countries. We also have to think of a reference time, which could be any time from the earliest historical time to the cotemporary modern time. In India, various types of people have lived in different kinds of geographical terrains and in diverse cultures since ancient times. All health and its disorders were given due attention.

A society may be understood to have need of intelligentsia, warriors and protectors, administrators, businessmen, craftsmen, and of those rendering services. Therefore, children had to be educated and trained accordingly depending upon their intelligence, capacities, and aptitude. This is broadly the same as contemporary thinking about children except that now there is no Varna vyavastha and it is not the teachers who decide upon a child's career or profession but the parents and the child himself [1].

B. Navigating Our Thoughts: Fundamental Principles of Thinking

All Round development of a child is classified as physical, mental, spiritual, and intellectual. In Ancient Indian Education System, The mental Development was given more significance and the rest was eventually be demonstrated by the man of vision of India namely Ramanujamji, Shri mahatma Gandhi, Shri. Buddha, Saints, Rishis, Aryabhataji, Bhaskaraji, Varahamiharaji, Charak samhita, Maharishi Patanjali and Shri Mahaviracharya and Shri Chanakyar .the list is full of man of vision who builds and the Nation Bharat was glorified by all of them.

The Education is a tool used to develop the all round development of a child.

C. A Theory of Human Thinking

Our ancient Indian Ancestors by their visionary thinking ability, described Astrology, and develop the culture and custom using which, the Indians were lived a happy healthy satisfied life.

D. Mapping New Experience

The psychology, philosophy, science, maths, language are all in oral transmission. The teacher taught all the arts and skills to their disciples and the students hear, listen and remember and retrieve all. Slowly all were recorded in scriptures. The disciples then took it to next generations and this is how our Bharat Lived since CE PERIOD. Now in modern period, the thinking process was redirected by the British rulers and the intellectual development is given more priorities. After 1600 AD to till date 2020, our Indian thought process is redirected towards application of others' thinking and not similar to the visionary thoughts as our ancient Ancestors practiced and lived.

E. Emotions

If you act more in accordance with your emotions, knowing and understanding what you are feeling will help you be effective in making wise choices. Being able to name your emotions and identify the reasons for your feelings will be important. Confusing anxiety and excitement could mean missing out on important events. Confusing excitement and happiness could mean pursuing new experiences and losing out on contentment.

F. Thoughts, Feelings and Behaviors

We're often not aware of the impact our feelings and behaviors have on each other, and because of this relationship, changing our behaviors can have a very big effect on our emotions. We can often tackle depression by changing key behaviors, and for many young people this is the most direct way to help them improve their mood. So where do thoughts fit in? When we talk about thoughts, we're referring to a lot of different mental activities, including wishes, hopes, plans, predictions, judgments and memories. Thoughts often include words but sometimes they can include pictures, speech, or even smells.



Fig 2.1 Emotions

Most of the time we don't notice our thoughts – they go on in the background, helping us make decisions and carry out

many tasks automatically. Sometimes, we become aware of our thoughts - for example when we try to work out a puzzle, or remember a specific event, or do a specific task, like write a letter to a friend or learn a new language.

G. Biometrics and Thoughts

Transformation: But in any case, I confess that I participated in a meeting with the Dalai Lama at MIT, and some of his people were there – including one of his senior people, who lives in Paris and serves as his contact person and translator in France. I couldn't tear my eyes away from this man. He radiated. He had such inner peace and such a sense of happiness, and I'm absolutely not cynical enough to overlook it.”[2].

H. Happiness to Satisfaction

Happiness is a momentary experience that arises spontaneously and is fleeting. Meanwhile, satisfaction is a long-term feeling, built over time and based on achieving goals and building the kind of life you admire.

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III. EXISTING METHOD KLMN SWASTIK MODEL - MAN OF VISION

The contributions of the four domains namely, parents, teachers, and digital society and nature or universe the ecosystem must be given as input to the child's education process and the child will learn it all and give back to the four domains by becoming better man of vision.

K-KNOWING L-LEARNING; M-MIND MAPPING N-NEW CONTRIBUTION

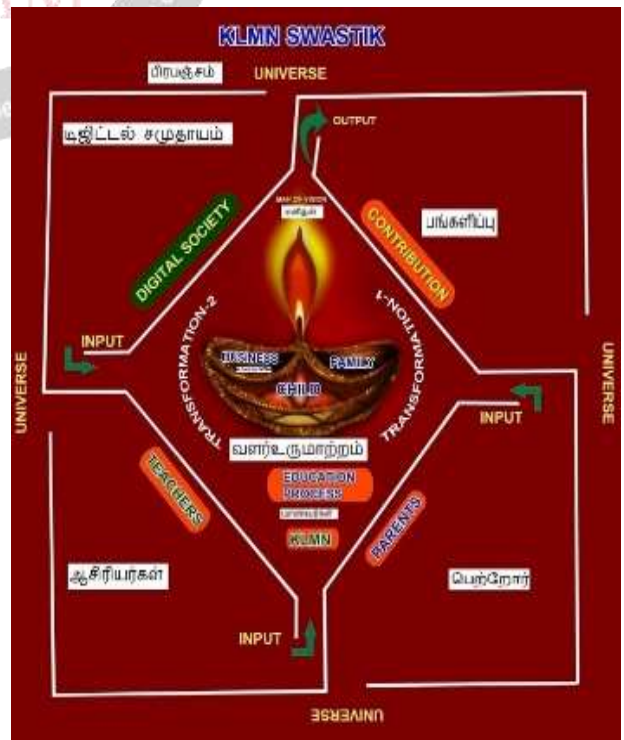


Fig3.1 Klmn swastik Education Logo

A. Combining the Values Of Feeling, Thinking And Behavior Of A Child For Quality Education.

The nurturing of a child into a Man with a vision is mainly associated with the conceptualization of human abilities. A happy child can be developed as an influencing happy man. A happy man can contribute positively in all dimensions to the betterment of the fellow citizens. The Education system must have methods to inculcate unique distinguished subjects for instilling and developing emotional intelligence and academic intelligence. The quality of a man can be assessed by the quality of education system and the quality of education may be improved, if it could include the assessment for emotional quotient and Intelligent Quotient.

Education System= Intelligent Quotient (Academics) + Emotional Quotient (Personality trait) [3].

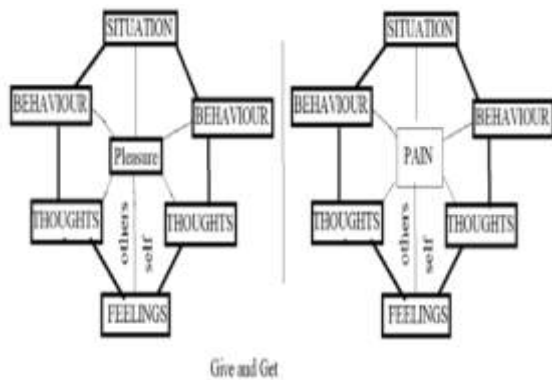


Fig 3.2 Give And Get Emotions

B. Development Of Contributing Spirit For Self-Transformation In Nation Building Through Education.

The technological changes and the lifestyle of humans make it more important and vital to nurture of children to be active and engaged citizens. Every educationist is obligated to provide the support in inculcating the skills that the children need to live happily. A Revolution is needed in the education system to instill the four traits namely Individual character, social ethic characters, national character-building traits, and Nature preserving characters through education. The Social Responsibilities of every teacher lies on building the four-character traits among the children who then transformed as a Man of Vision with contributing spirit and universal outlook. This paper proposes the character education to support the teacher in achieving the same through teaching learning process [4].



Fig 3.3 Contributive Spirit

IV. PROPOSED METHOD MACHINE OF VISION ALGORITHM

The mental growth is associated with age and environmental factor or the society within which the child is living.

The proposed method is an innovative thought of extending the innovative idea of inculcating good values and behavior in child for healthy mental development. The proposed method can now be implemented in humanoid machine teacher so that the machine teacher can inculcate all values and facing the challenges in the students in the new 21st century online education life stream.



Fig 4.1 Human Life Cycle- Mental Development Aspect

The proposed method consists of three modules viz.,

- 1) Biometric Sensor Design
- 2) Mentalligence Data Base Design
- 3) Decision Support System Design With Artificial Intelligence

The biometrics namely, the tears, saliva, sweat and urine can be collected and stored from various people according to the factors influencing the mental structure through biometric sensor. The full data and information for every biometrics along with the factors representing the feelings, thoughts and behavior are saved and recorded in the Mentalligence database (BIOMETIRC VARIABLE).

The proposed machine of vision algorithm is implemented in decision support system with artificial intelligence.(INTELLIGENCE VARIABLE).

A. Design and Development Of Machine Of Vision Algorithm

• Problem:

Link the feelings, emotions, thoughts with the behavior and the outputs from the sensory organ. The tears, sweat, urine are the three biometrics that can be used to find out the threshold proportion occurs during mental process. Mapping the mental with intellect and storing the history of any case in the Mentalligence database. From this database, any real time decisions can be made by the proposed humanoid machine of vision called KVS machine.

B. Building Blocks Of Algorithm

Sample of the following are collected and saved for computation.

- Tears
- Sweat
- Urine
- Saliva
- Brain resilience test
- Decision support system with artificial intelligence

C. Decision Support System with Artificial Intelligence

The emotions are classified, and the behaviors are recorded for future decisions. In problem solving method, existing methods are referred and accordingly decisions are made, similarly, those decisions are stored in the Mentalligence database. But now, this is the decision maker artificial intelligence system, which can then consult with the Mentalligence database could take new decisions just like a human. Here the mental and intellect are stored and deployed in decision making.

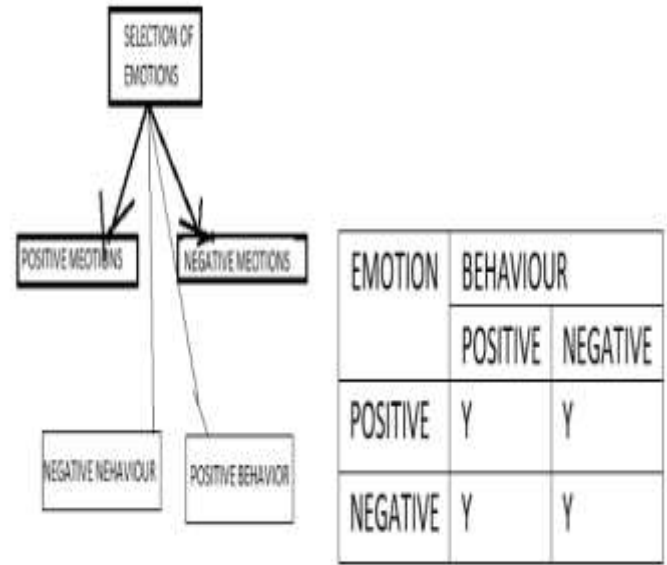


Fig 4.2 Mov-Table

D. Proposed Machine Vision Algorithm

The proposed Machine of Vision Algorithm is as follows.

MACHINE OF VISION ALGORITHM SPECIFICATION

MENTALLIGENCE(BIOMETRICS,INTELLECT)

--- INPUTS : MOV: BIOETRICS,INTELLECT

---OUTPUTS:RESULT =MOV

MACHINE OF VISION ALGORITHM CAN BE DEFINED AS (BIO=BIOMETRICS AND INT=INTELLECT)

Mentalligence(bio^{*},int^{*})

--- bio, int

If bio >0 (is positive) and int <0(is negative)

Result:=bio

Else if bio <0 (NEGATIVE)and Int <0(negative)

Result:=no selection

Else if

Bio <0(negative) and Int >0(positive) then

Result :=int

Else

Bio >0(positive) and int >0(positive)

Result :=int

---result =MOV

Notations

bio^{*},int^{*}

BIO=BIOMETRICS AND INT=INTELLECT

Negative means non adaptive and non favourable

Positive means adaptive and favourable

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Fig4.3 Machine Of Vision Algorithm

E. Working Of Machine Of Vision Algorithm

Using the biometric sensors, the age specific biometrics from various sources is collected. Using the machine of vision algorithm, the mental changes and progress are

diagnosed using brain resilience tests or any other psychometric test are deployed for computing the mental changes in terms of brain representation. The test is used to just design and develop the Mentalligence database. The third part empowers the artificial intelligence domain in which the machine or humanoid exactly accepts the inputs (the biometrics in real time say when it comes across people crying or working or trespassing of eating in various social environments) and sends it to the decision support system. In this domain, the decision is to be taken based on the machine of vision algorithm. So, the proposed machine of vision humanoid can take decisions by Artificial intelligence enhanced by Mentalligence database.



Fig 4.3 Synergy Of The Blocks

F. Mentalligence Database Design

The outcomes of various emotions, thoughts and feelings are reflected in tears, sweat, urine, and saliva...Hence these chemical and clinical compounds are taken as inputs for Mentalligence database design. The data and information after completing the diagnosis in terms of Brain AND heart are collected and stored in the database called Mentalligence database. This is the main storage using which the humanoid machine of vision (say KVS) can be able to take decision in real time life real human beings. This acts as an enhancing parameter to artificial intelligence.

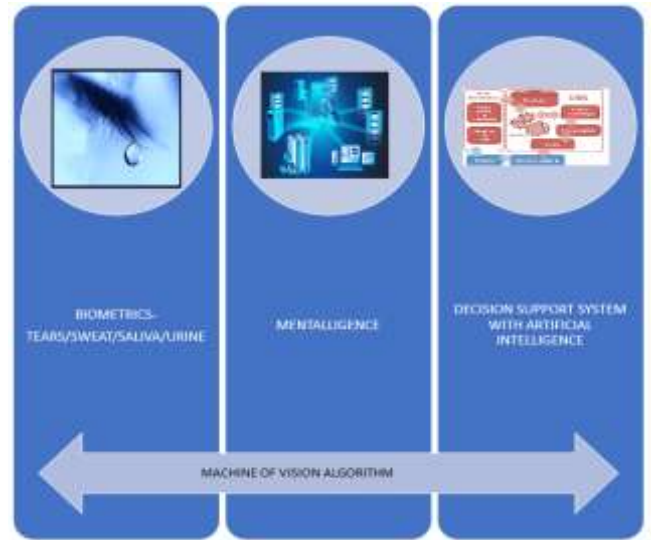


fig 4.4 machine of vision system

V. RESULTS AND DISCUSSION

The machine copes more effectively by representing the biometrics primary key and intellect primary indices. . The factors affecting the happiness and life satisfaction namely, Personality, Self-esteem, Outlook on life, Age, Life events and experiences, Seasonal effects, values -the economic materialism represented in terms of money is considered as value ,culture,family,career,social yardsticks are all collected and recorded in Mentalligence[5].

A. Decision Making Skill

After collecting the sample, the best mental status is measured using the sample test and recorded for threshold. The minimum and maximum are computed, and better range could be determined

Form biometric test result, the brain resilience [6] can be diagnosed and the Mentalligence table can be derived. Using

- Values to Build Resilience
- associate intelligence with mind -Mentalligence
- for each emotions and mental activity or function of mind, the corresponding brain and its status or functional medical report are tabulated.

A. Truth Table for Actions and Consequences

The biometrics is associated to the object-oriented database called Mentalligence data base. The proposed Mentalligence database consists of three tables namely 1. Heart diagnosis truth table, 2. Brain diagnosis truth table and 3. Machine of vision truth table.

The machine of vision teacher can then apply the decisions from these two-decision support system tables by implementing the machine of vision algorithm in selecting or taking new present decision and actions and it can also be saved in the same table for further reference.

✓ Decision Support System-1. Heart diagnosis truth table

The biometrics are diagnosed for heart measurement and the associated behaviors or decisions already taken by human are saved and recorded in the truth table- called Decision support system -1.

Decision Support System-1. Heart diagnosis truth table

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SLNO	BIOMETRIC ID	AGE	FACTORS/SITUATION TIME	BIOMETRIC THRESHOLD INDEX (+VE/-VE) heartbased	ACTION TAKEN	CONSEQUENCES FACED	CONSTRUCTIVE/DESTRUCTIVE

Fig5.1 biometric diagnosis truth table

Fig5.1 biometric diagnosis truth table

The Field Items of The Heart Diagnosis Truth Table Are

1. Biometric-Id,
2. Age,
3. Factors/Situation Time ,
4. biometric Threshold- Index (+ ve /- ve) heart Based , Action Taken ,
5. Consequences Faced,
6. Constructive/Destructive

B. Decision Support System-2. Brain Diagnosis Truth Table

The biometrics are diagnosed for brain measurement and the associated behaviors or decisions already taken by human are saved and recorded in the truth table called

Decision support system -2.

Decision Support System-2. Brain diagnosis truth table

The biometrics are diagnosed for brain measurement and the associated behaviors or decisions already taken by human are saved and recorded in the truth table called decision support system -2.

SLNO	BIOMETRIC ID	AGE	FACTORS/SITUATION TIME	INTELLECT THRESHOLD INDEX (+VE/-VE) intellect based	ACTION TAKEN	CONSEQUENCES FACED	CONSTRUCTIVE/DESTRUCTIVE

Fig 5.2 intellect diagnosis truth table

Fig 5.2 intellect diagnosis truth table

The Field Items of the Intellect Diagnosis Truth Table Are

1. Biometric-Id,
2. Age
3. Factors/Situation Time ,
4. Intellect Threshold- Index (+Ve,-Ve) Intellect Based ,
5. Action Taken ,
6. Consequences Faced,
7. Constructive/Destructive

C. Empowering Artificial Intelligence with Biometric Mentalligence

The machine of vision table provides the choices of actions and consequences to the humanoid (say KVS teacher machine) .This empowers the machine teacher’s artificial intelligence with biometric Mentalligence to assist the machine of vision teacher which(who) ,would then select the better decision and implement the same ,from those two choices namely, first one from the biometric based, i.e., from Decision support system-1 and the second choice from intellect based, i.e., from Decision support system -2.

D. Machine Of Vision Truth Table

MACHINE OF VISION TRUTH TABLE

SLNO	BIOMETRIC ID	BIOMETRIC THRESHOLD INDEX (+VE/-VE) heartbased	INTELLECT THRESHOLD INDEX (+VE/-VE) intellect based	DECISION TAKEN BY MOV ALGORITHM	EXPECTED CONSEQUENCES FACED	CONSTRUCTIVE/DESTRUCTIVE

Fig.5.3 MOV Truth Table

Fig.5.3 MOV Truth Table

The field items of the MOV truth table are

1. Biometric-Id,(Primary key)
2. Biometric Threshold- Index (+Ve/-Ve) Heart Based,
3. Intellect Threshold- Index (+Ve/-Ve) Intellect Based,
4. Decision Taken By Mov Algorithm,
5. Expected Consequences Faced,
6. Constructive/Destructive

The Artificial Intelligence is used to select the best decision by implementing the machine of vision algorithm from the two input decisions namely emotional decisions from decision support system-1 and intellectual decisions from decision support system-2 which are stored in the machine of vision truth table in the Mentalligence database and any one decision has to be taken by the artificial humanoid machine.

VI. FUTURE SCOPE

The scripts are ancient databases. It represents the tour map about the choices of making decision and options are from individual’s thinking skill set. Also, it clearly describes the significant factors influencing the same, which varies from individual to individual and explained in a strictly confidential manner without ambiguity.

In the near future, this machine of vision would become such a script to the next younger generations. Digital Scripts are already available, but machine of vision teacher enhanced with Mentalligence may come into existence as a teacher in home schooling. Such living humanoid machine teacher can touch the student to transform into a man of vision there by transforming the whole world with full of noble humans as in ancient period. So, every student will have the machine of vision teacher with (AI) full information and data like digital library together with emotional information and data capable of handling the emotions of the student [7].



Fig 6.1 Machine of Vision Popular Philanthropist with Character Building

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CONCLUSION

In this technological time, humanoids with emotions and decision based on emotions may be useful interesting topic of research. This may be a new small seed in this artificial intelligence domain enhanced with mental intelligence - Mentalligence may be fruitful direction in the machine world. In future a machine of vision humanoids will be designed to support human.

REFERENCES

- [1] Dr.Komalalakshmi.J,A Design and Analysis of Chinmaya Vision Program on Outcome based Education, International Journal of Information Research and Review, December, 2017, Vol. 04, Issue, 12,December,2017pp.4848-4851.
- [2] Creswell, J. D., Welch, W. T., Taylor, S. E., Sherman, D. K., Grunewald, T. L., & Mann, T. (2005). Affirmation of personal values buffers neuro endocrine and psychological stress responses. *Psychological Science*, 16(11), 846-851
- [3] Dr.Komalalakshmi.J., KLMN Teaching Technique for Transformation in Education, International Journal for Research in Applied Science & Engineering Technology ,Volume 6, Issue II, February 2018 ,UGC Sponsored journal ISSN-2321-9653 pp-372-381
- [4] .Dr.J.Komalalakshmi, Development of contributing spirit for self-transformation in nation building through education, International journal of creative research thoughts (IJCRT), ISSN:2320-2882, Volume.6, Issue 1, Page No pp.1412-1419, February 2018
- [5] Dr. Komalalakshmi J, A Pedagogical Approach to Combine the Values of Feeling, Thinking and Behavior of a Child for Quality Education, *International Journal of Indian Psychology*, Vol. 6, (1), DIP: 18.01.094/20180601, DOI: 10.25215/0601.094,.

- [6] Dr.Komalalakshmi.J. J, A KLMN SWASTIK Model for all-Round Development of students based on Educational Psychology. *International Journal of Indian Psychology*, 7(2), 843-851. DIP:18.01.103/20190702, DOI:10.25215/0702.103
- [7] Dr.Komalalakshmi J, Impact of Contemporary World Scenario: Habitat Destruction and Significance of Quality Education: Philanthropist Construction, *International journal Of Multidisciplinary educational research* Issn: 2277-7881; Impact Factor: 6.514(2020); Ic Value: 5.16; Isi Value:2.286 Peer Reviewed and UGC Approved: Volume: 9, Issue:1(3), January: 2020. Pp:153-160.