

A Hypothesis to develop Programmable Intelligence using Magnetic Fields generated by **Human Mind**

Rajat Sharma, Sanjai Kumar Diwaker, Bineet Kumar Gupta

Abstract: Programmable intelligence is the need of Future Cognition technology. Certain cells and tissues in living organisms have ability to produce electric fields and Electric current develops magnetic fields around it and vice versa. To find out the possibility to control the intelligence artificially using the said mechanism of electromagnetism is a big challenge at present. Developing a technology to induce intelligence through programmed magnetic fields generated in a planned and sequential way. Mechanism of computer aided generation of magnetic fields (CAGMF) applications in plants like 'touch me not' has a big concern for intelligence development. Intelligence in plants can be assessed using neuroimaging techniques. Further a model can be developed for programmable intelligence for humans as well. As an outcome of our analysis, we concluded that a model can be developed using "CAGMF" Further, experimental approach to test the hypothesis would be a validation of proposed model.

Keywords: Magnetic fields, Human Mind, CAGMF, Neuroimaging.

I. INTRODUCTION

f I here are popular sayings about the mind like "The Mind sees all". "The Mind controls everything". But can the mind be controlled and programmed to do whatever we want? If the answer is 'yes' then how? In Electromagnetism it is a well-known fact that the electric current produces a magnetic field around it and the magnetic field when gets associated with a conductor produces an electric current [1]. Galvanism is a field of Biology which mentions the ability of certain cells and tissues to produce electric fields which is called Animal

Manuscript received on March 15, 2020. Revised Manuscript received on March 24, 2020. Manuscript published on March 30, 2020.

- * Correspondence Author
- * Bineet Kumar Gupta

Rajat Sharma*, Research Scholar, Department of Computer Application, Shri Ramswaroop Memorial University, Lucknow Deva Road, Barabanki, Uttar Pradesh India Email: rajatcivilsharma@gmail,com

Sanjai Kumar Dewakar², Research Scholar, Department of Computer Application, Shri Ramswaroop Memorial University, Lucknow Deva Road, Barabanki, Uttar Pradesh India Email: sanjaydiwakar@gmail,com

Bineet Kumar Gupta, Associate Professor, Department of Computer Application, Shri Ramswaroop Memorial University, Lucknow Deva Road, Barabanki, Uttar Pradesh India

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

Electricity which is due to Voltage- gated ion channels. Our Central Nervous System (CNS) works in same way producing electric fields through neurons. Magneto Encephalography (MEG) is a Neuroimaging technique for the analysis of brain activities by recording magnetic fields produced by neurons in brain. [2] According to our hypothesis this technique be further advanced by integration of some other features such as conversion of magnetic signals received by MEG sensors into electrical one and further conversion of electric signals into digital signals so that machines can perform their activities on getting signals from brain. Computer Aided Generation of magnetic fields (CAGMF) 'a proposed technique' which can be developed in Computer Science through which a planned and sequential magnetic fields be generated through computer programming. Further, these programmed magnetic fields can be tested for the application on living beings to induce intelligence of our choice into their nervous system. Programmable human intelligence (Magnetonised Mind) is endeavor which results from integration Electromagnetism, Galvanism, Enhanced MEG (EMEG) and Computer Aided Generation of Magnetic Field (CAGMF). According to our study with the successful convergence of CAGMF and Enhanced MEG (EMEG) we expect to get following results.

- -We will just need to think to let a machine to perform any task. EMEG will help machine to detect magnetic radiations and perform the task accordingly.
- -We will be in position to detect many of the neurological problems. EMEG will help doctors to study about the disease or disorder and CAGMF will help to cure it.
- -Our pre-saved memory would be regenerated to us. Through CAGMF we will be able to recreate our saved memories from database already prepared
- -Future Mobile Communication. In order to communicate to anyone we would not even need to speak. We would just think, EMEG will detect a signal generated by our central nervous system and transfer it to receiver and through CAGMF he will be able to receive the message.

-Data Security and privacy will be hard-lined. We would need to think about a particular sequence so as to generate a particular set of magnetic fields which would be detected by EMEG and device will be locked or unlocked. Rectification is not possible.

II. EXISTING NATURAL MECHANISMS

There are some palpable phenomenon occurring in the nature which supports our hypothesis in several ways [7-8]



Published By:

A. Bioelectromagnetism

The term refers to the ability of living organism to produce electric field and response of the cell to Electro-magnetic field. The Italian physician, physicist, biologist and philosopher Luigi Galvani coined the term Animal Electricity and this area is known as 'Galvanism' [3]

B. Electrophysiology

Electrophysiology is the study of electric properties of biological cells and tissues. It pertains to flow of ions (ion current) in tissues. These electric events happen due to action potential of the some of our body cells like neurons, muscle cells as well as some plant cells. 'The ion channels' are the communication media between them. Electric Eels are even able to generate its electric field outside their body.[4]

C. Transcranial Magnetic Stimulation (TMS)

TMS technique proves that a changing and strong magnetic fields when applied to living organisms can induce electric current in conductive tissues such as 'Brain'. This technique was developed to replace Electroconvulsive Therapy (ECT) which is shock treatment to brain. [2]

D. Magnetoreception

Honey bees have magnetic material in front part of the abdomen while in vertebrates mostly in 'ethmoid region' of head. Experiments prove that input from magnetic based receptors in birds and fish is sent over ophthalmic nerve branch of trigeminal nerve to Central Nervous System.[5-6]

E. Magnetobiology

Magnetobiology is study of biological effects of weak and static low frequency magnetic fields. Magnetic navigation is performed by the migrant animals. Some of the birds, turtles, reptiles, amphibians and fishes are able to detect small variations of geomagnetic field and its magnetic inclination to find their seasonal habitats [5-6]

Above experimental facts and natural phenomenon justifies the idea of Inbuilt programming which is naturally feeded in certain organisms. Features such as 'inclination compass and polarity compass'[5-6] clarifies this. The idea an organism gets through Earth's magnetic field is actually induced thought process or electric field in that organism. Our proposal is the idea of developing Artificial Programming for inducing thought process or intelligence.

III. PROPOSED FEATURES FOR THE MAGNETONISED MIND

The technology which we pursue in our hypothesis will have certain features as mentioned below.

A. On the Front end

Magnetic fields from the brain of user would be detected through MEG then magnetic field signals would be converted into the digital signals (0s and 1s) so as to let machine perform its task digitally. Reverse Engineering of above task i.e. releasing the 'programmed and sequentially planned' magnetic flux to the brain so as to induce certain thought or intelligence into our Central Nervous System.

B. One the Back end

We would Study the magnetic fields detected from Brain through MEG Then Recording of the patterns of magnetic fields and programming of the machine will be done same way according to the pattern so as to function in a particular way when it receives magnetic field of pre recorded pattern. Preparation of private and public databases will be needed. Generation of Sequential planned Magnetic fields through complex computer programming is proposed through CADMF. We would also need to increase and decrease intensity of magnetic fields as per use [13].

IV. FUTURE PROSPECTS OF THE HYPOTHESIS

In future we will be working on development of the following technologies

A. Enhanced Magneto Encephalography (EMEG) technique

Magneto Encephalography is the method of functional neuroimaging in order to map brain activities by recording magnetic fields of brain using very sensitive magnetometers. This is performed by arrays of SQUIDS (Superconducting Quantum Interference Detectors) But now another technique called SERF (Spin Exchange Relaxation Free) is being developed for future machines. [2]

"Enhanced Magneto Encephalography" EMEG technique will contain certain additional features in addition to mere detection of magnetic fields such as:-

- Conversion of Magnetic signals into Electrical signals
- Further conversion of Electrical signals into Digital signals (0s and 1s) i.e. into machine Language.
- Conversion of digital signals into electrical signals.
- Conversion electrical signals into magnetic flux
- Inbuilt feature of increasing and decreasing the intensity of magnetic fields must be present

B. Computer aided Generation of Magnetic fields (CAGMF)

We propose a technique named CAGMF to generating sequential amd computer programmed weak magnetic fields. This would be possible once the different sets of magnetic fields, which were detected through MMEG, are studied and proper database is prepared. Then we can analyze and will be in condition to develop such fields.

Once successful we would be able to generate a thought process of our wish in any of the living organism. It would need complex software/hardware programming which would lead to generation of controlled Magnetic Field Generation as well as its release to body tissues. We can start our experiments with plant tissues, such as those of "touch me not" and observe effects of CAGMF on to it.

V. METHODOLOGY

Our final endeavor is to develop CAGMF and its successful application on to connective tissues of brain and hence inducing electric signals in our Central Nervous System

which would be, inducing programmed intelligence in humans [8-10].



Journal Website: www.ijrte.org



In order to achieve the above said, we would need to study the different sets of magnetic fields developed by Brain at different instance of thought processes. It will be properly mapped and database will be created through lab experiments. Then we will start preparing computer program for generation of sequential magnetic fields in planned way. These magnetic fields will not be tested o human brain directly.

Plants such as Touch me not show visible movements upon touching, so it would be plausible to start with this plant. Further we will test this mechanism on rats in laboratory. At last we will observe this on human brain [11-12].

VI. RESULT AND DISCUSSION

The contents of the research work focused on development of two novel techniques named Enhanced Magneto Encephalography (EMEG) and Computer Aided Generation of Magnetic Fields (CAGMF) these techniques combined would be used for the proposed model/ technique. A technology is proposed to be developed so as to let a device perform task as according to our thoughts. We will just need to think and upon thinking this device (with our technology inbuilt) will perform its task. Many a technologies are and being develop to make our task easier and quicker but this technology will be peak of all these technologies. Many paralysed patients will be able to control their devices and their tasks will be done a lot easier. National Defence can also use this technology in various forms and functions since no use of satellite is required and secrecy can be improved. Indian Spies can use it in their advantages. It can also be developed into future communication technology under which we only have to think and communication would be executed. The technology developed upon successful practical implementation and verification of this hypothesis will revolutionize the current field of "Automization" technologies. This will be peak of automization technology under which a gadget will perform its functions based on our thinking. This will be fastest of all technologies developed until now. This can be further upgraded into reverse processing of thoughts in the human brain. When these both combined into one will lead to another novel field of communication and information technology.

VII. CONCLUSION

As an outcome of our initial hypothesis the above said model will work through integration of 2 proposed techniques named as Enhanced Magneto Encephalography (EMEG) and Computer Aided Generation of Magnetic Fields (CAGMF). Experimental, approach is proposed in this hypothesis for validation of our proposed model (Magnetonised mind) and determination of the application areas for this model.

REFERENCES

- Rajat Sharma, "Unique Identification through Magnetic Fields Generated by Brain", International Journal of latest trends in Engineering and Technology , Vol (9) Issue(3),pp.195-196, DOI: http://dx.doi.org/10.21172/1.93.33, e-ISSN:2278-621X.
- Hallett, M.: Transcranial magnetic stimulation and the human brain. Nature 406 (2000), 147–150

- Mullen, T. R. et al. Real-time neuroimaging and cognitive monitoring using wearable dry EEG. IEEE Trans. Biomed. Eng. 62(2015), 2553–2567
- Piccolino, M. Animal electricity and the birth of electrophysiology: the legacy of Luigi Galvani. Brain research bulletin, 46(5) (1998), pp.381-407.
- Scanziani, Massimo; Häusser, Michael "Electrophysiology in the age of light". Nature. 461 (7266) (2009), 930–9.
- Wiltschko W, Wiltschko R (August 2005). "Magnetic orientation and magnetoreception in birds and other animals.". J Comp Physiol A Neuroethol Sens Neural Behav Physiol. 191(8)(August 2005): 675–93.
- Wiltschko, F.R. & Wiltschko, W. "Chapter 8 Magnetoreception". In Carlos López-Larrea. Sensing in Nature. Springer(2012).
- Kumar N., Khan R.A Assortment of Information from Mobile Phone Subscribers Using Chronological Model [IGCM]: Application and Management Perspective. In: Wyld D., Zizka J., Nagamalai D. (eds) Advances in Computer Science, Engineering & Applications. Advances in Intelligent Systems and Computing, vol 167. Springer, Berlin, Heidelberg.(2012)
- Mandal PK, Banerjee A, Tripathi M and Sharma A (2018) A Comprehensive Review of Magnetoencephalography (MEG) Studies for Brain Functionality in Healthy Aging and Alzheimer's Disease (AD). Front. Comput. Neurosci. 12:60. doi: 10.3389/fncom.2018.00060
- Ueno S, Lovsund P, Oberg PA. 1986a. Effects of time-varying magnetic fields on the action potential in lobster giant axon. Med Biol Eng Comput 24:521–526.
- Ueno S, Lovsund P, Oberg PA. 1986b. Effects of alternating magnetic fields and low-frequency electrical currents on human skin blood flow. Med Biol Eng Comput 24:57–61.
- Iramina K, Ueno S. 2007. High spatial resolutional measurement of biomagnetic fields. IEEE Trans Magn 43:2477–2479.
- Lauterbur PC. 1973. Image formation by introduced local interactions: Examples employing nuclear magnetic resonance. Nature 242:190–191.

AUTHORS PROFILE



Rajat Sharma did his under-graduation from Lucknow University and is 'Gold Medalist' in his post-graduation which was completed from Babasaheb Bhim Rao Ambedkar University (A Central University), Lucknow. Currently he is a PhD Scholar and during his PhD , he had published 12 research

articles in numerous journals and conferences.



Mr. Sanjai K. Diwaker has done Master's in Computer Application, Physics, Information Science with more then 16 years experience in area of University Administration and Computer Science. He is actively involved in Software Development using J2EE Technologies, and six years teaching experience in Computer Science. Prior to joining this University, he

was working as Information Scientist at University of Kanpur and at Media Lab Asia, IIT Kanpur as Research Associate.



Dr. Bineet Kumar Gupta is working as an Associate Professor and Head of Department of Computer Application, Institute of Technology, Shri Ramswaroop Memorial University Lucknow-Deva Road, UP, India.

Dr. Gupta has 11 years of teaching experience at undergraduate and post graduate level and research experience at National and International platforms. His area of research is E-learning, Information Retrieval and Security, Software Engineering, Human Computer Interaction and ICT. Dr. Gupta has a wide experience of guiding PG and Doctoral students of Computer Science stream. He has published about 50 research papers in various journals, conferences and symposia of national and international recognition. Currently, he is working in the area of Information and Communication Technology.



Published By: