International Journal of Computer Information Systems and Industrial Management Applications
ISSN 2150-7988 Volume 18(23s) 2026 pp. 386-397
https://doi.org/10.70917/ijcisim-2026-5582
Article

CSN Quantum Computing Processes in the Human Brain

Catalin Silviu Nutu[1]

[1]Department for General Engineering Sciences of Constanta Maritime University, Constanta, Romania
nutu_catalin@yahoo.com
[1]https://orcid.org/0000-0001-7234-6869

Abstract: CSN stands for Catalin Silviu Nutu, and it is the acronym for the name of the author who has developed the theory related to the CSN Algorithm, such as presented in his previous work published so far. Current conventional and classical AI models today, mainly based on supervised and unsupervised learning, have almost reached their limits, and they are completely insufficient and totally inadequate to simulate and to model highly sophisticated and complicated brain processes involved in highly creative and extremely innovative brain processes. Based on the theory introduced, developed and presented by the author related to the CSN Algorithm and by introducing a new type of special matrix named CSN Matrix of Activations, this paper generates a quantum computing model named CSN Quantum Computing brain model. This paper expands on the latest work of the author presented in his last papers on this topic, namely "Decryption of Evolutionary Fractals by means of Procedural Randomness generated with an Intelligence Model based on the CSN Algorithm", presented at the International Conference XR Salento 2025 in Otranto, Italy, and a subsequent paper entitled "Enhanced Intelligence Models based on the CSN Algorithm", also published in 2025, in the International Journal of Computational Engineering Research (IJCER)
Keywords: CSN Quantum Computing brain model, CSN Algorithm, evolutionary fractals, procedural randomness, sophisticated intelligence processes

1. Introduction

In this paper, exactly as in all the other papers related to the same topic, CSN stands for the acronym of the author's name Catalin Silviu Nutu, who has introduced and developed the concepts and the theory related to the CSN Algorithm, such as presented in [1], [2], [3] and [13].

Usually, when one does not understand something, does not understand where that something comes from, or has no explanation or rule for, one does usually designate it as random or accident. This fact refers also to the ununderstood and weird quantum phenomena, which appear to be random phenomena corresponding to a probability wavefunction.

Those ununderstood phenomena which seem to occur randomly, however, may be in fact not randomly at all, but they could actually be phenomena having unknown hidden rules.

When being highly creative and extremely innovative, or when making breakthrough discoveries in scientific research, human brain processes do not follow specific patterns.

The human brain processes of those highly creative and innovative persons work in totally different ways which are far better simulated by the CSN Algorithm presented in [13], namely the brain "jumps" apparently chaotically between totally different pieces of information stored in the mature human brain and comes out with totally new ideas and theories which do not seem to be related at all with past knowledge and past information.

This kind of human brain processes are said to follow quantum processes because they are so much related with the quantum phenomena and the result of those processes is ununderstood in the very same way the quantum processes are ununderstood.

But, as already said before, it may very well be that these highly intricate and sophisticate brain processes are not random at all, and they may simply be exactly those human brain processes with unknown, ununderstood and hidden rules.

This paper explains that human brain quantum processes can be interpreted and defined as CSN quantum processes, being generated based on the CSN Algorithm.

The intelligence stage of machines, envisioned and forecasted by the genius of Alan Turing [16], who has understood and predicted that an intelligent machine is a machine able to learn based on information is fed with, has almost been achieved, namely an artificial intelligence able to simulate the mind of a child learning and accumulating knowledge and combining that information to derive some new knowledge, by reinforcement learning.

At that time, Turing had very great hopes and expectations regarding the performances of an intelligent machine, able to do almost all a man could do. One can easily understand Turing's optimism, enthusiasm, his high excitement and his hopes, regarding the concept of AI, because, almost every time when one is at the beginnings with a brand-new idea or area of science, there is a feeling and it seems that there are endless possibilities and that almost everything is possible.

Almost always, in those preliminary phases, one cannot see the limitations and the complicated details related, but everyone sees only the perspectives and the bright side related to those new initial ideas for the respective uncharted science territory.

Once one goes deeper and deeper on the respective area of science, one understands increasingly better the complexity, the issues and the limitations one is confronted with on the respective field of science, and those initial high excitement and great hopes fade out, and that initial enthusiasm seriously decreases, once the complexity and the issues are gradually better understood and because of the confrontation with the harsh reality.

This is exactly what really happened in the '70s of the previous century, in the so called "winter of AI", when those initial hopes and enthusiasm vanished overnight, due to the lack of enough computing capacity power.

In the very same way, it is also very possible today, that AI will soon again enter in a renewed period of "winter", and no much progress will be made, unless significant contributions are made on the realm of understanding the complex mechanisms highly human intelligence processes are subjected to, and how quantum processes really occur in the human brain.

Besides that, Turing also understood, at his time, that the secret for the real success of AI lies in the understanding of Nature and of actual functioning of the human brain. For that matter, he especially took courses of biology and physiology, and can be hence assumed, that after some time he gradually began to realize the complexity of generating a real intelligence.

But the Turing's goal, as declared by himself was "I do not want to create a sophisticated, super intelligent brain, but I only want to replicate an average, mediocre brain like the brain of the AT&T general manager".

In that sense, AI has succeeded and the respective Turing's goal has nowadays almost been achieved. Moreover, as it will be presented later in this paper, the continuous degradation of human intellectual capacity, due to the excessive use of AI, it may be very possible that very soon AI will surpass the permanently decreasing human intelligence.

Current conventional and classical AI models today, mainly based on supervised and unsupervised learning [5], [6], [7], [9] and [10], have almost reached their limits, from the point of view of the methods used, and moreover, they do not reflect the highly unusual thinking processes involved in the most highly sophisticated creative human brain

thinking processes. These current classical AI models, may only be appropriate to simulate supervised, unsupervised and reinforcement learning processes at the intelligence stage of childhood, when the brain starts to learn the basics.

Once this first stage of learning has passed, human learning processes become more and more sophisticated, based on both, on the information already acquired and on the methods of learning related to that acquired knowledge, and this is as well, an intermediary level of intelligence, which AI has not achieved yet.

As the degree of sophistication significantly improves and increases along with the processes of learning, one cannot simplify or trivialize anymore learning and complicated thinking processes and reduce them to the current AI models.

The final stage of intelligence related to innovation and creativity is the intelligence stage on which this paper focuses and makes reference. This most sophisticated stage of intelligence, not only involves the knowledge acquired in previous two stages mentioned before, but also assumes specific advanced intelligence models, able to simulate the highly creative and sophisticated intelligence processes taking place in the human brain.

Only this kind of highly sophisticated thinking processes can have as outcome genial results and creative and innovative ideas which can generate breakthrough discoveries in science and in the scientific research.

Current AI models are becoming increasingly obsolete nowadays, also because real intelligence it is less about the computational power, such as microprocessors' speed and storage capacity, but it is more about the very core of the AI models used, with their underlying methods and algorithms.

Hence, the remaining next main challenge is to replicate and simulate highly complex and sophisticated quantum human brain processes. This could be proven as being very hard, for a handful of different and various reasons. Notwithstanding the fact that quantum processes are very hard to be grasped, one has to deal with two different serious issues to be addressed and solved.

On one hand, it raises the question whether the quantum processes in the human brain are governed by the very same laws as the laws of the quantum mechanics, or the quantum processes occurring in brain are just unexplained and inexplicable quantum forward leaps made by the human brain. This paper addresses exactly those unexplained forward leaps made by the brain during these highly sophisticated and complex thinking processes.

On the other hand, an additional question is if those quantum computing processes specific to the human brain could be understood, how can they be replicated in a physical machine?

Meanwhile, until these two fundamental questions above are answered, human brain quantum processes may be interpreted as CSN quantum processes generated using the CSN Algorithm.

The weaknesses, insufficiency and shortcomings of the current AI models used today, have been extensively addressed by the author in [15], where he has also explained, more detailed, the inadequacy of these models to simulate highly sophisticated creative thinking processes.

This is also why the author of this paper, has proposed alternative enhanced intelligence models (EI models), enhanced by using the process of detraining, process meaning the running of the CSN Algorithm, such as presented in [14].

These quantum processes in human brain, can be interpreted and defined as CSN Algorithm based processes, corresponding to related CSN Matrices with extremely large numbers of lines and columns.

This paper expands on the latest work of the author on this topic, as presented in [13] and [14] and links randomness and uncertainty, specific and inherent to quantum processes with the quantum computing processes in the human brain. This link is made by using the CSN Algorithm and its related concepts of evolutionary fractal and procedural randomness in order to generate a very specific model for the human brain, named CSN Quantum brain model.

A few decades ago, R. Feynman introduced the idea according to which quantum processes may be related to fractal processes [4], with unknown rules. In order to deepen this assumption and idea of Feynman, the author of this paper has coined a few important terms and concepts. Based on these concepts one should be able to relate and to link more closely the fractal processes and quantum processes.

These terms and concepts coined and explained by the author in his previous work on the same topic [13], are the concepts of evolutionary fractal, defined in opposition with the concept of evolutionary algorithm and the concept of procedural randomness.

One way to understand human brain quantum processes and thus, to hack the human brain is to use the CSN Algorithm to understand and decrypt quantum computing processes, first for simple evolutionary processes in Nature, and only then for the complicated human mind.

The concept of procedural randomness introduced by the author, emphasizes the importance of random and trial and error inherent to many groundbreaking and highly innovative and creative scientific discoveries. At the same time, it is also shown how procedural randomness can be generated using the aforementioned CSN Algorithm proposed by the author. Based on this algorithm, can be simulated and replicated how disruptive transitions and forward leaps in thinking could take place in the human brain.

In order to model the CSN Algorithm, one can use the Python Environment [8] to generate the Python script related to the CSN Algorithm attached as Appendix to [13].

This connection between quantum processes and fractals may also serve as intermediary step toward the decryption of the respective thinking quantum processes, which could be made by decrypting the evolutionary fractals underlying to the respective quantum processes.

The CSN Quantum brain model presented in this paper uses, besides the two CSN Matrices introduced in the last published papers of the author, as a novelty, a new type of matrix, named CSN Matrix of Activations. This new matrix is responsible for triggering thinking corresponding to the respective quantum computing processes in this latest generated brain model.

The CSN Matrix of Activations associated to the respective CSN Quantum brain model, has in its cells the TKeys which have the role to start the creative thinking processes in different regions of the brain.

This model proposed and also provided in this paper for the functioning of the human brain, can be summarized as it follows.

Based on hints or intuitions, as received from “nowhere” or “out of nothing” by the human brain, hints or intuitions associated to random input Tkeys, the innovative thinking process starts.

The human brain, then, computes the specific calculations according to the algorithm presented, and outputs a result which will be linked, as input to further computations corresponding to this model.

This whole process continues on and on, until the brain is no more able to find information or is no more able to link the outcome of the algorithm with another input, because of lack of more synapses or brain connections.

Afterwards, the process can continue only if new information is fed into the Matrix of Elements of this model, or possibly the brain’s connections represented by the Matrix of Operations are also completed with new ones, by the addition of new information.

2. METHOD. The research question, issues addressed, assumptions and data used to model CSN quantum computing processes in the human brain

2.1 The research questions

Since ancient times, mankind struggled to understand and to make sense of the mechanisms of thinking and logic [11] and has been preoccupied with these. The research question of this paper is how to generate a quantum computing brain model, based on the theory related to the CSN Algorithm.

This brain model would be then able to simulate and model more appropriately and more adequately the creative quantum processes involved in highly complicated brain processes.

The research question of generating a quantum computing brain model may be addressed by taking into account the next main issues related to this model and their related assumptions.

One main issue in this intended model of the quantum computing brain is linked to how the respective quantum brain process can be triggered and what can determine the entire chain of thoughts related to the respective quantum brain process.

Another main issue which needs to be addressed is how to link the model of the quantum brain with the CSN Algorithm introduced and presented by the author in his previous literature.

The third main issue addresses the causes of interruption or stopping of the respective quantum brain process.

2.2 Issues addressed, explanations, assumptions and data used to generate the CSN quantum brain model

The CSN quantum thinking process may be triggered due to various reasons, most of them presented in [12], which can be mainly categorized in either high frequency and high excitation states of the brain or, on the contrary, in the highest calm states of the brain. These states of highest excitation or highest calm of the brain, may be able to cause energy levels of neurons, which determine firing of neurons in certain brain regions.

In both of these opposite and extreme states of mind, the actual state of the brain of high excitation or high calm may determine energy states levels of neurons, energy states which have the potential to trigger highly creative and extremely innovative thinking processes.

In terms of the theory and concepts presented by the author, in those states of mind, the brain is able to generate the Truth Keys (TKeys) able to start and to determine the initial firing of neurons and hence to start the respective quantum thinking processes, and thus being able to make unusual and extraordinary connections.

They are named by the author Tkeys because they have the potential to unravel certain truths or to open the door to find those certain truths, by starting the related CSN Quantum computing processes in the human brain.

There is not very much more to add to this explanation related to the activation or triggering of the quantum brain process, for the reasons presented below.

One main assumption related to the triggering of the thinking process is that nobody can exactly explain how a certain idea came up in one's brain or a how the very first thought related to a certain idea occurred.

Many brilliant people, who are also often times humble people, explain that they feel these first thoughts as received from "nowhere" or from "outer space" or from God, but they cannot explain more detailed the occurrence of their first thoughts.

Others, explain these first thoughts of theirs, as being sheer luck, random or accident and others, as being generated by their cleverness. Some others try hard to explain them as being based on their previous thinking processes, but they cannot actually explain more detailed how they came up with a certain idea or solution to a certain problem.

In order to add more explanations and details to the activation related to a certain quantum thinking process, in the very same way in which nobody really knows what was before or what caused the Big Bang, or in same way in

which no one knows how life came up, in the very same way no one knows where these initial ideas and thoughts come from.

Also, in the very same way in which one's inexplicable and incomprehensible life, is not the same with the sum of the events in one's life, brilliant new ideas are not necessarily based on previous ones and they do not represent a logical combination or a sum of past information and knowledge, but these new ideas go far beyond previous knowledge, such as presented in [12].

Hence, all in all, no one can explain what triggers and generates the first event in a certain chain of thoughts related to a certain creative thinking process.

However, this is one of the most serious predicaments of the intelligence in general, and the ones believing in an Intelligent Project, have their own explanations for the occurrence of the activation in this quantum process, the others have their explanations in accidents and randomness.

The activations corresponding to the triggering of the neurons' firing in the human brain will be modeled using a special type of matrix, introduced and named in this paper as the CSN Matrix of Activations. The elements in the cells of this matrix will be represented by TKeys, according to the theory presented by the author in his previous works.

Hence, the model introduced and developed in this paper is based this time on the data and information stored in three different CSN Matrices, the CSN Matrix of Elements having the task of storing the information, the CSN Matrix of Operations having in its cells the functions which enable to link and to transfer information between the neurons, and the latest introduced CSN Matrix of Activations, which is responsible for triggering thinking and for activations of the various different brain regions.

Each element in the CSN Matrix of Activations corresponds to the activation of a certain region of the brain, and that is why its structure, as presented later on, comprising the lines of latitude and lines of longitude, is associated with the brain's architecture involved in the highly creative thinking processes.

Each element in the CSN Matrix of Activations corresponds to a certain range or interval of corresponding TKeys values, and each of these elements have associated their own CSN Matrix of Elements and their own CSN Matrix of Operations, both these matrices being responsible for a specific region of the brain involved in highly innovative thinking processes.

The issue of correspondence between the theory related to the CSN Algorithm and the quantum brain processes is presented in the paper using the analogy between the human brain and a sphere with longitude and latitude lines, this is to say, parallels and meridians. At their intersections are the neurons in which is stored the information corresponding to the CSN Matrix of Elements, communicating with each other by means of the functions stored in the cells of the corresponding CSN Matrix of Operations.

The interruption or stopping of the respective quantum brain process can be explained either by exhausting of all existing information, either in the CSN Matrix of Elements or in the CSN Matrix of Operations, corresponding to the respective brain. The brain can then put the respective thinking process "on hold", but the process can subsequently continue by adding cells in either of the two matrices before, that is to say either by adding information or by adding connections between the neurons. If neither information is added nor new connections are made, then the respective process, most likely stops.

When excessively using AI, the human brain renounces to do both, namely to store information and to create synapses in the brain, and this has as a result and effect the decrease of brain's capacity and skills.

Exactly in the same way in which comfort, sloth and laziness have destroyed empires from within in the past, in the very same way, if not properly managed, AI also has the potential to decrease and even to destroy human intellect, intelligence and thinking, out of lack of enough thinking activity.

When someone learns and acquires new information, in doing this, the one's brain also improves its performance and its own capacity, because that acquirement of information besides adding new knowledge, also causes further neurons' connections, as well.

This is exactly why AI may be already considered as toxic and dangerous, and at the same time this situation also makes the scenario on man-machine singularity, dreamed of many, much likelier and much sooner possible, because of a human race becoming increasingly dumber, concomitantly with AI becoming increasingly smarter.

And this is why the excessive use of AI may be deemed as a poisoned gift for mankind and for humanity, because its use is made at the cost of human intelligence and human creativity.

3. the CSN Quantum Brain Model

This section of this paper explains, on one hand, in a simplified way, how the human brain actually behaves when dealing with certain tasks and why the CSN Algorithm is a powerful and useful tool to be used for simulating the respective brain processes, and on the other hand, introduces the model of the CSN quantum brain, based on the algorithm mentioned.

3.1 The thinking and learning model of the CSN quantum brain

In order to better understand how human mind works, why the CSN Algorithm may be a useful and powerful tool, and why human brain is by far more efficient in terms of performance and efficiency than AI, let us suppose that someone has the simple task to memorize seven words or seven ideas.

The first step is to memorize each of the seven ideas, but then, when the respective one wants to remember and to check the correctitude and completeness of information stored in one's memory, the respective person checks remembering those ideas by checking their number, respectively 7. If the respective person has remembered, for example, only 5 or 6 of those words or ideas, then the respective person's brain starts to "jump" in forward leaps to find and identify the missing words or ideas, which in the case of the presented model are stored in the corresponding CSN Matrix of Elements.

And this is exactly how human mind works and processes information, in the most efficient and most effective way possible, continuously compressing and optimizing huge amounts of data and permanently reducing them to very small bits of information.

Hence, that is why, human brain is able to assess, almost instantly, based on small quantities of information, hints or intuitions, outcomes which can be deemed as being similar to the outputs of the CSN Algorithm.

This is another main reason, why the proposed CSN Algorithm is so powerful and so appropriate to simulate complicate brain processes, because it does the very same thing: it reduces big amounts and big chunks of data stored in both CSN Matrices to single and simple bits of information, such as just a single corresponding number, like the TKey is.

And therein lies one of the main strengths, the value and the usefulness of the CSN Algorithm, exactly in reducing that huge information and large and complicate chunks of data stored and necessary to be processed, to a single Matrix of Activations of a certain set of identified TKeys, corresponding to a new scientific theory, for example.

Based on these ideas presented above, a certain scientific theory of a researcher can be deemed as being encoded or encrypted by its corresponding Tkeys, based on the information stored in the CSN Matrices of Elements and Operations corresponding to the respective researcher's brain.

The facts presented above about the human thinking process, also explain another more important thing, namely they explain how human brain is able to create, invent and come up with the most brilliant new ideas, most of those ideas having nothing or little to do with past knowledge or past information.

Thus, while present classical AI models are working by rummaging through enormous amounts of data and consuming huge amounts of energy, human mind manages almost always to get by and to reach far better results than AI, with a lot less information and with considerably less effort, through this kind of optimization processes, such as described before.

The outmost complex functioning of the human brain and especially the quantum functioning of the human brain was rather without much success approached by biology researchers and scientists, and some recent studies and ideas on this topic, can be found in [17] and [18].

According to [17], quantum algorithms may be important actually for revealing deep truths, not only for tech and quantum computing.

On the other hand, according to [18], human brain and human brain architecture are far more complex than imagined, with structures having up to eleven dimensions and the gap between the AI and the real biological intelligence may be actually a real canyon.

3.2 The physical model of the CSN quantum brain

The human brain may be modeled as a sphere, similar to the Earth globe, having lines of latitude (parallels) and lines of longitude (meridians) such as presented in Figure 1.

Unlike the numbering of parallels and meridians where the equator or Parallel Zero is at the center of the globe, in this model, the parallels and meridians are numbered such as presented in the Figure 1.

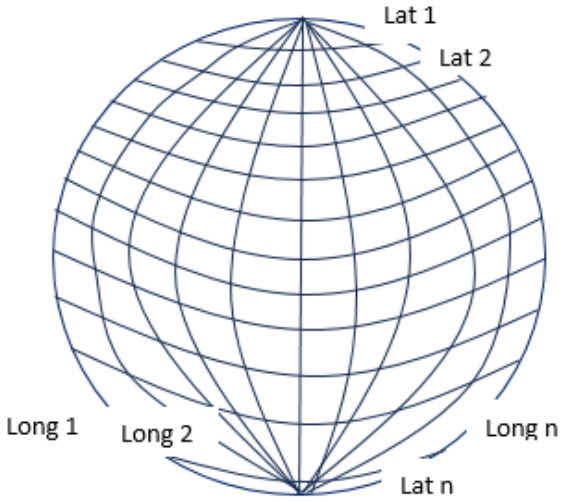

Figure 1

In the model proposed in this paper, having a simplified architecture of the Earth globe, the neurons/ brain regions are situated at the intersections of the parallels and meridians. However, this model can be further expanded, extended and improved by considering not only one layer, but more layers.

Each of the three CSN Matrices (of Elements, of Operations and of Activations) used in this physical model of the brain, correspond to each of the available neurons/ brain regions and are positioned at the intersections of parallels and medians in this model of the human brain, as shown in the Figure 1 above.

Because these three CSN Matrices are associated to each certain region of brain, they have the following matrix structure, in which the cells which do not belong to that respective brain region are considered to be empty, or to have zero elements.

In the very same way, inactive neurons or inactive regions of the brain are also considered to be of zero elements in the CSN Matrices associated with the respective brain.

$$[Lat\_1, Long\_1 \quad Lat\_1, Long\_2 \quad \dots \quad Lat\_1, Long\_n \quad Lat\_2, Long\_1 \quad Lat\_2, Long\_2 \quad \dots \quad Lat\_2, Long\_n \quad Lat\_n, Long\_$$

Structure of the CSN Matrices

Data and knowledge acquired by the brain is stored as information in the cells of the CSN Matrix of Elements, and in the physical model associated to this brain above, in the respective positions of the neurons/ brain regions.

The connections, respectively synapses may be then associated with the functions stored in the CSN Matrix of Operations which is able to link the information using the specific functions in its cells. That is also why, the more synapses there are, the more solutions and alternatives are possible, using the very same amount of information. In the same way, the quantity of information stored in the cells of the CSN Matrix of Elements, also enables more potential solutions.

The CSN Algorithm associated to the brain region of the initial triggering, then simulates the first step in the chain of thoughts generated by the triggering or neurons' firing in this initial particular neuronal region of the human brain.

The entire chain of thoughts or the whole thinking process associated to the model of the CSN Quantum brain is determined in the following way:

1) One or more TKey activation elements of the CSN Matrix of Activations determine the triggering of the thinking process by firing of either a single certain neuronal region or by a simultaneous firing of more neuronal regions concomitantly, which means the activation of the brain by a single TKey, or a by multiple TKeys acting simultaneously. Each of those Tkeys activating the quantum brain has its own pair formed out of the matrices CSN Matrix of Elements and CSN Matrix of Operations, responsible for information and for connections/synapses in this brain model.

2) The output of the CSN Algorithm triggered at the step before determines the activation in another brain region and, at the same time, this output represents the new input in the CSN Algorithm, CSN Algorithm which this time corresponds to this last brain region activated.

3) The thinking process or this chain of thoughts, only stops when the brain has remained out of information, meaning no further related to this thinking process is available in the cells of the CSN Matrix of Elements associated to this last brain region, or when brain remains out of brain connections/ synapses, this is to say no further functions are available anymore in the CSN Matrix of Operations corresponding to the CSN Matrix of Operations associated to this last activated brain region.

A trivial coarse representation of this model, which can be useful as a visualization and for a better understanding of a related thinking process can be found in [19].

The CSN Matrix of Activations in this model, may or may not have classical activation functions in its cells such as in the present artificial neural networks, but what is essential it is that the activations are made based on TKeys values stored in this matrix. This matrix has same structure of parallels and medians as the other both matrices and corresponds to activations of various certain brain regions.

A TKey may be hence deemed, just as a single idea or a thought, but the activation may be also caused by two or more TKeys acting concomitantly and generating CSN Algorithms running simultaneously, as processes working in parallel, in the thinking human brain.

A certain interval of TKeys has as outcome the activation of a certain brain area and to the respective area corresponds a layer formed of one specific CSN Matrix of Elements and one specific CSN Matrix of Operations.

CSN Matrices of Elements corresponding to this brain model are, in principle, not very different from the memory storage of a computer, for example, and they only simply contain the total amount of data and knowledge stored as information in the brain.

However, what is of paramount importance, and what makes every single brain different and unique in its computing ability to relate that information are the particular CSN Matrices of Activations and CSN Matrices of Operations corresponding to the respective brain computing processes.

These two matrices are actually the key to understand the amazing capacity and abilities of highly performant creative brains, and in this respect many different assumptions can be made.

These two CSN Matrices which make up one's creativity, may be highly depend on the brain sensitivity of that particular person and they may be conditioned by a wide variety of particular specific factors.

These factors may be the one's brain structure, the one's own training, depending intentional experiences and the one's unintentional experiences. That is why it is highly difficult to know how one's particular brain responds and acts upon specific conditions it is subjected to.

This explanation above, is also why, even based on the very same CSN Matrix of Elements, because of the high significance of the other two CSN Matrices, the outputs of the CSN Algorithm can be so different, from person to person.

4. Results

The main result of this paper is the model itself proposed which allows to model the brain and its activity, based on the correspondence between the architecture of the brain and the geographic grid of the Earth globe.

This model presented could be used to decrypt a quantum brain. Furthermore, after decoding those inherent rules and laws of the human brain quantum processes, one may have a better understanding of the quantum phenomena and processes in general.

Hence, one may use thus the information related to the quantum computing in the human brain, also to better understand and to decrypt the rules and laws of the rest of quantum phenomena.

Concomitant activations corresponding to two or more TKeys, generate simultaneous and concomitantly running in parallel of the respective CSN Algorithms associated with the corresponding CSN Matrices of Elements and of Operations.

Using the CSN decryption, one can actually decrypt those highly intricate and extremely sophisticate brain processes, by finding their unknown hidden rules of those processes.

By identifying certain rules and paths in the quantum processes human brain using the CSN Algorithm, one may actually come to the conclusion that those ununderstood quantum processes may occur not randomly at all, but they actually follow rules and patterns which can be actually decrypted.

The theory presented in this paper may also be employed to generate further different models for quantum brain processes, or it may be used to generate quantum based enhanced intelligence models.

5. Conclusion

Quantum processes may be deemed as fractal processes with unknown rules. The author of this paper has coined the terms of evolutionary fractal and procedural randomness to address complicated brain processes involving change of the fractal's rule and sudden disruptive changes corresponding to the jumps in forward leaps made by the brain in highly creative thinking processes.

This is because when making brand new, breakthrough scientific discoveries or when solving highly complicated problems, the information is not purely procedurally processed, in linear and deterministic ways, such as

in common and usual simple learning and thinking processes, but it depends of a serious degree of randomness and the human brain is able to make huge forward leaps to find highly innovative and creative solutions.

Unconventional learning and creative problem solving is essentially determined exactly by those quantum processes in the brain, human brain which is able to make giant forward leaps in the respective thinking processes.

The CSN Algorithm developed by the author can be employed to simulate sophisticated thinking processes, in the very same way as a thinking brain attempts a certain specific decryption or attempts to figure out a solution to a complicated problem, and that is why the CSN Algorithm proposed, if properly employed can also be used as a tool to decrypt quantum processes in general and quantum processes in the human brain, in particular.

The model developed and presented in this paper, can be filled in with the most various information corresponding to the actual data stored in the CSN Matrix of Elements, corresponding to the actual functions which transfer and link the above information and with the actual interval values of the Tkeys stored in the CSN Matrix of Activations.

However, in order to simulate and to model the real way in which the human brain works, specific data and information related to the biologic processes and biology of the brain in particular have to be mastered, in order to generate a model somehow closer to this amazing and extraordinary machine which is the human brain.

In order to do this, one should understand better what the activation mechanisms of the human brain are, and how activation occurs in the states of highest calm or in the states of highest excitation of brain.

One should also have a better understanding of how the information in the neurons is stored and accessed, and what are the specific brain functions which allow communication and transfer of information between different regions of the brain.

This model presented, can also be further expanded, extended and improved by considering not only one layer such as presented in this paper, but more layers of brain activity, each one having its own network of parallels and medians.

Based on all what has been presented so far, the human brain activity may be thought as being the reunion and the result of activity of different brain's regions, sections and layers, each of them computing simultaneously, in parallel, outputs corresponding to the CSN Algorithm, based on the particular matrices of information, activations and operations specific to that respective brain.

Those outputs, almost instantly "computed" by the brain, are regarded as inputs of further similar processes corresponding to this algorithm.

Such complicated and high energy consuming computing processes as described above, similar in energy consumption to those in the block chain technology, may be replicated by artificial computing machines, but not for the sake of secrecy or for the sake of safely keeping money, but on the contrary, for the sake of revealing secrets of Nature and secrets of the functioning of human brain.

6. Acknowledgement

My thanks to Constanta Maritime University for its financial support, by paying the registration fees for a couple of my published papers throughout the years, and also for this paper, part of the representative "CSN Enhanced AI Project"

REFERENCES

1. Nutu, C. S., Axinte T.: "Communication with Nature based on a Combined Multiplicative/Additive Encryption Model", Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies XI, 124931H-10, Proceedings of SPIE, Vol. 12493, 2022: 369-378

2. Nutu, C. S., Axinte T.: “Microelectronics and Nanotechnology and the Fractallike Structure of Information, Knowledge and Science”, Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies VIII, 10010 100101I-1, Proceedings of SPIE, Vol. 10010, 2016: 394/402
3. Nutu, C. S.: “Decryption of Evolutionary Fractals by means of Procedural Randomness generated with the CSN Matrix”, International Journal of Computational Engineering Research (IJCER) ISSN 2250-3005, Vol.14, Issue 4, Jul-Aug 2024.
4. Nutu, C. S., Axinte T.: “Fractals. Origins and History”, Journal of Marine Technology and Environment, Vol. 2, 2022, 48-51
5. M. P. Deisenroth, A. A. Faisal, C.S. Ong: “Mathematics for Machine Learning”, Cambridge University Press, 2020
6. Mitchel T.M.: “Machine Learning”, McGraw-Hill Science/Engineering/Math, 1997
7. Mehlig B.: “Machine learning with neural networks”, University of Gothenburg, Göteborg, Sweden 2021
8. Halvorsen H.P.: “Python Programming”, ISBN:978-82-691106-4-7, 2020
9. Thomas A.: “An introduction to neural networks”, 2019, https://coursehero.com
10. Ezekiel S., Pearlstein L., Alshehri A.A, Lutz A., Zaunegger J., Farag W.: “Investigating GAN and VAE to Train DCNN”, International Journal of Machine Learning and Computing, Vol. 9, No. 6, 2019, 10.18178, 774/781
11. Dumitriu A.: “Istoria Logicii (The History of Logic)”, Editura Tehnica, Bucharest, 1993
12. Nutu C. S.: “Hunting for Genius. What is Brilliance? Can A.I. be brilliant?”, Journal of Marine Technology and Environment, Vol. 1, 2024, 29-34
13. Nutu C.S.: “Decryption of Evolutionary Fractals by means of Procedural Randomness generated with an Intelligence Model based on the CSN Algorithm”, International Conference XR Salento 2025, Otranto, Italy, June 17-20, 2025, Proceedings, Part VII, 117-130
14. Nutu C.S.: “Enhanced Intelligence Models based on the CSN Algorithm”, International Journal of Computational Engineering Research (IJCER) ISSN 2250-3005, Vol.15, Issue 10, Oct 2025
15. Nutu, C. S.: “Weaknesses, shortcomings and insufficiency of current AI models”, International Journal of Computational Engineering Research (IJCER) ISSN 2250-3005, Vol.15, Issue 12, December 2025
16. Turing A.: “Victoria informatiilor” (Victory of intelligence), Editura Litera, Bucharest, 2025
17. https://www.linkedin.com/posts/mudassar-hussain-94b3852a7_fblifestyle-quantumleap-mattermystery-activity-7400828609382305792-ejjY?utm_source=share&utm_medium=member_desktop&rcm=ACoAACln0o0B765bo1A40ZLWExUZtlQPMztGkiM
18. https://www.linkedin.com/posts/joe-glick-11a412_we-dont-know-what-intelligence-is-struggling-activity-7395843763232952320-6lYN?utm_source=share&utm_medium=member_desktop&rcm=ACoAACln0o0B765bo1A40ZLWExUZtlQPMztGkiM
19. https://www.youtube.com/watch?v=6EOk9-gU8Kc