ABOUT THE SPEED OF WORK OF THE HUMAN BRAIN

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Annotation. The article deals with the study of the human brain, how the system of the human brain works, its performance, how the performance is measured. The system of measurement and the unit of measurement in other objects and other systems are given. The analysis of the control process is carried out, depending on the object or process, on the basis of which, on the basis of the information obtained, an algorithm and control software are developed. The temporary development of the algorithm and control software T_a, T_a is determined less than the control time T_{con}. The algorithms are developed in a real-time system.
Key words: control, research, brain, person, measurement, algorithm, program, time, object, processes

Any intellectual activity is inextricably linked with the work of the human brain [1]. Is it possible to create charming and artificial constructive information. Intelligence, when we don't know what is natural intelligence - about the human brain? Of course not. First of all, we must learn about the structure of the human brain, about the mechanism of the human brain, about internal and external communication, about the process of controlling the system of the human brain, about the speed of work, about the unit of measurement of the human brain, as well as other behavior of the human brain, about its restrictions, details to obtain constructive and meaningful information and knowledge [2].

The human brain is a perfect natural system, including an extremely complex and unique system, which has many subsystems, subdivisions and at different levels. The question is how does it work, what speed systems, what means and methods?The human brain consists of 100 billion neurons, 100 trillion memory, connecting the nervous so many paths between them, and so on. [3] The products of the human brain are intelligence, the mind for solving any problems. There should be a unit of measurement, there is a statement by scientists that over time we will learn to accurately calculate in bits any work. [4]

So, as, on the basis of the arithmetic operation in the human brain, moreover, one operation of disjunction (logical addition), an artificial intelligence machine is developed, a mathematical calculating machine - a decisive machine. Let us give some system unit and the definition of speed from other areas [5]. The movement parameters are set in the form of different numbers:

A measure of the relative structural complexity of a molecule (ratio of specific heats):

$$J = \frac{C_{v_0}}{C_{v_0}}$$

Compressibility measure (Mach numbers):

$$M = \frac{U}{\sqrt{jR_pT_0}} = \frac{U}{a_0}$$

A measure of the ratio of inertial force to connectivity (Reynolds number) is the speed of light:

$$R_e = \frac{P_0Uh}{\int 0} = \frac{UL}{V_0}$$

A measure of the effect of motion on a magnetic field (magnetic Reynolds number. Light speed:

$$C = \frac{1}{\sqrt{\eta\mu e}} = 30\square 10^5 m/s$$

The speed of sound

$$M = \sqrt{jR_pT}$$ (for monatomic gas $a = 1{,}18T^{\frac{1}{2}}\square 10^2 m/s$).

The mass of an electron is 9.10-28. Dimensionless parameters (physical quantities): linear dimensions L-b in astrophysics are measured by a number of the order of 10*6, and in laboratory conditions -1 m; the speed in astrophysics reaches 10,000 meters / sec., the time t_0 = L / U is of the order of ~ 1/100, the phenomena flowing in at T_0<1 / 100, is neglected; the number of parts in a unit of volume is assumed to be 10 / 12-10 / 20 molecule / cube itself; the mass of the electron is 9 * 10-28, and the mass of the proton is -1.6 * 10-20; etc.

Each of these units of measurement is unique, these relationships depend on the nature of the process, on the laws that control the process, on the environment [7].

Comparing these modules and using the theory of the similarity of the structures of the human brain, it is axiomatic that the structures of artificial intelligence machines are similar. The unit of measurement of these machines in bits [5]. Therefore, the speed of the computer is measured by performing the number of operations in bits per second, bit / sec. Speed, operation speed 10 million operations and sec, op / sec. But by comparing the system of the human brain and the computer as it is impossible, the speed of the human brain is 100 billion times higher in all relation, space and time. Maybe in space the human brain of a different system of measurement, here it may be appropriate to take into account the theory of relativity. Thus, the speed of the human brain is several times greater, several times greater than the speed of light. Why does the human brain system manage its own system, the entire human body, all tasks in human life? Management of all tasks outside the human body, in which the human brain works in parallel, in a multi-program mode. Real-time mode, time-sharing mode. The human brain works with a program composed on the basis of a developed algorithm (algorithms) which, in parallel, several programs (quite a lot) of an automatic, automatic, automated control system.

Automata, automatic regulation and control systems are developed as a biological system of natural intelligence, it is carried out by biological, biochemical, biophysical, chemical processes, all these processes are controlled by cybernetics automatically. [11] The emergence of

a direction in the study and study of the human brain systems such as biocybernetics, neurocybernetics, medical cybernetics. There are scientific results in all directions, you can use it when solving your research [8, 9, 10.]. As a physical model, a mathematical model, they compare these models with the work of the human brain system, because the model is not 100% complete. Exactly exactly.

(Model) - (object) = Δ difference, this does not mean a model of the human brain, but this is something else. The human brain system works precisely, efficiently, optimally, without a single mistake, without a single defect, taking into account all the existing possible laws of the universe and the distant ones of this space and time. All these processes are controlled on the basis of an algorithm, the problem is that how the control, the object and the ongoing process is developed for all cases.

Is it possible to learn the mechanism of algorithmization, how it develops algorithms for receiving information, processing and analyzing information, corresponding to the algorithm, regulation, if necessary, and at the end of control algorithms. Summarizing the treatises, the doctrine is all possible as biological, physiological, technological, biophysical, chemical, as well as cybernetic, biocybernetic, neurocybernetic, mathematical, physiological, logical point of view that the system of the human brain is the language of the human brain. Like any language, there is an alphabet of the object of this language of the human brain, on the basis of the rules and laws of this language a sentence is formed - this sentence is an algorithm of an object or process, and the process of regulation, control and management. Compilation or development of algorithms and programs is carried out automatically regardless of human intelligence and reason. Intellect and intelligence are the result of the work of the human brain system, the work of this algorithm and program. The algorithm and programs are developed in a real-time system.

The algorithm is developed automatically, regardless of the complexity of this control process, and the algorithm and the program are developed in real time $\Delta\tau$ τ_{con} Where τ_{con} - process control time. $\tau_{con} - \Delta\tau = \tau$ - difference.

Processes occur in parallel on the same plane of time and space or different planes of time and space. In the first, information from all points (or an object) arrives simultaneously for control, controls and regulates each object with appropriate algorithms and a program, and information is received from external objects for control, if necessary, solving control problems, an algorithm and regulation and control programs are developed. Every object is controlled by the human brain, every neuron is regulated, every connection between the elements of the human brain, every movement is controlled and controlled. The speed of the work of the human brain is high enough, how to measure, which unit of measurement to take or develop is still an interesting riddle, like other riddles of the human brain.

These algorithms are developed in real time $\tau_1 - \tau_0 = \Delta\tau$, $\Delta\tau$ - this time is so much, but time is needed by a controlled object or a controlled process, no less and no more. $\Delta\tau = \tau_{\text{demand}}$ This time can be measured in another measuring system, here the theory of relativity can be applied, the human brain can be working in a different space and time. The architecture of the human brain, its structure, control system, regulation, control, as well as the automatic development of a control algorithm, all time and the present were interested in this problem. Obtaining a constructive solution, revealing the secrets of the human brain, also determining its

speed of operation and the unit of measurement and performance is the key to the further development of the science of artificial intelligence.

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