

Continuous Growth of Information and the “Forgetting” Function in the Recognition of Sound Information

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Abstract:

The paper presents the results of experiments with the most stable results in such a crucial issue as teaching the system to new visual and audio objects of information. In parallel, a mechanism is presented that allows the system to move to a new level of learning – self-learning. The developed self-learning method is a delayed learning mechanism, when the system learns to recognize new objects without a special command and when information characterizing a new object can enter the system as needed (depending on the system operator). The next stage in the development of the system was the need to solve the problem of the rapid growth of information volumes and, accordingly, the shortage of disk capacities. The "forgetting" function being developed has three or four ways of implementation and the problems being solved allow us to look from the inside (drawing analogies from the point of view of software) at how human intelligence resorts to solve this problem to build similar abilities. At the end of the work, classes of visual objects are generally studied, which have not yet received a sustainable solution, and private methods need artificial adjustments with subsequent difficulties with integration into the general and quite harmonious mode of operation of the system.

Keywords: "forgetting" function, visual and audio information, virtual environment, contrasting boundaries, objects-sources of sounds, dictionary concept, mechanism of self-organization.



Dr. Shahnaz N. Shahbazova received the academic degree of PhD in 1995, the academic title of associate professor in 1996, the academic degree of Doctor of Sciences in Engineering 2015. Since 2002, she has been an academician, and since 2014, Vice-President of the Lotfi A. Zadeh International Academy of Sciences. Since 2011, she has held the position of General Chair of the World Conference on Soft Computing (WConSC), dedicated to the preservation and development of the scientific heritage of Professor Lotfi A. Zadeh. She is an Honorary Professor at Óbuda University in Hungary and

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Dr. Shahbazova participated in many international conferences as Organizer, Honorary Chair, Session Chair, member in Steering, Advisory or International Program Committees and Keynote Speaker. She is vice president of the International Academy of Science named Lotfi A.Zadeh and president of the Fuzzy System Association in Baku.

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