

PRACTISE USING NEURAL NETWORK TECHNOLOGIES IN
DEVELOPING INFORMATION AND EDUCATION APPLICATIONSD.Zavolovich, O.Khoshaba
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Annotation. The work shows using neural network technologies to develop information and educational applications. Particular attention is paid to the relevance and necessity of using neural network technologies. It is noted that neural network technologies should be diverse and innovative. Examples demonstrate the informational and educational nature of neural network technology applications. Examples of the benefits of using neural network technologies in developing information and education applications are also shown.

The work aims to demonstrate the practice of using neural network technologies to develop information and educational applications. Particular attention must be paid to the relevance and necessity of using neural network technologies. Provide examples that demonstrate the informational and educational nature of the applications and the benefits of their use.

Relevance and necessity of using neural network technologies. Several key factors determine the relevance and necessity of using neural network technologies in developing information and educational applications (Fig. 1).

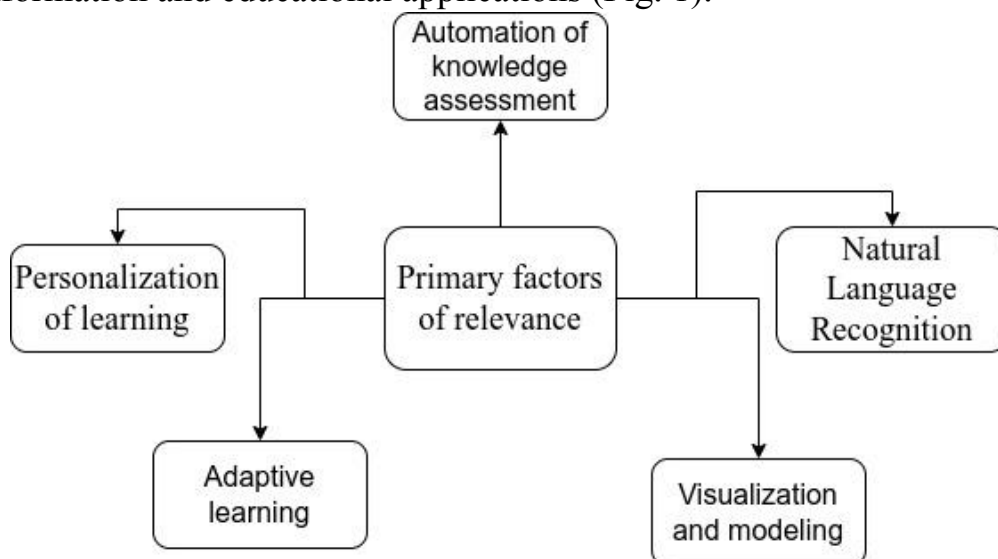


Figure 1. Relevance and necessity of using neural network technologies in developing information and educational applications.

Neural network technologies allow the creation of algorithms that can adapt to each user's characteristics. This means that educational applications can consider

learning speed, preferences in remembering information, level of knowledge, and other factors. Personalization makes learning more effective and exciting for the user.

Technologies based on neural networks have made significant progress in understanding natural language. This allows for more intuitive interfaces for educational applications, where users can ask questions and receive answers in natural language. Such opportunities make learning more accessible and convenient. Using neural networks contributes to developing adaptive learning systems that automatically adjust the curriculum based on student performance and preferences. This provides a deeper understanding of the material and increases motivation to learn. Neural networks can create complex visualizations and models that help students better understand abstract concepts and complex processes. Virtual laboratories, 3D modeling, and interactive simulations are examples of how neural network technologies can be used in education.

Using neural networks, applications can be developed that adapt to the needs of people with disabilities, making educational content more accessible to all population groups. Thus, integrating neural network technologies in developing information and education applications meets modern learning requirements, making it more personalized, interactive, and accessible. This helps improve the quality of education and the efficiency of the educational process.

Practice using neural network technologies to develop information and educational applications. These technologies can be diverse and innovative. We will show examples of how they can improve the educational process.

Adaptive learning systems. Using neural networks, you can create adaptive learning systems that analyze student responses and adapt educational material to maximize learning efficiency. These systems can identify each student's strengths and weaknesses, providing personalized assignments and learning materials.

Natural language recognition and interpretation. Neural networks trained on large amounts of text data can create interfaces that understand questions in natural language and provide detailed answers. This makes educational applications more accessible and user-friendly.

Personalization of educational content. Using neural network algorithms to analyze user preferences and behavior allows you to create personalized educational content. For example, if the system notices that a user learns information better through video, it can suggest more videos on topics of interest.

Automatic evaluation and feedback. Neural networks can automate evaluating student responses, including open-ended questions and essays. This provides instant feedback, which is essential for effective learning.

Conclusions. The work shows the practice of using neural network technologies to develop information and educational applications. Particular attention is paid to the relevance and necessity of using neural network technologies. Numerous examples demonstrate information and educational character in neural network technology applications. Examples of the benefits of using neural network technologies in developing information and education applications are also shown.