

USING ARTIFICIAL INTELLIGENCE IN EDUCATION SYSTEM

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Abstract

In the article discusses about using artificial intelligence in education system.

Keywords: artificial intelligence, education, system.

Introduction

With the development of technology and the introduction of artificial intelligence, educational systems are undergoing significant changes, especially in the context of computer science teaching. Modern education is going through a period of significant changes caused by the rapid development of technology. Artificial intelligence (AI) is becoming a key element of educational processes, contributing to the teaching of various subjects. In this article, we will look at how the use of AI in the educational process can improve learning efficiency, stimulate student interest and prepare the new generation for the challenges of the digital age and the use of artificial intelligence in the context of computer science education.

Existing methods of teaching computer science often face challenges, such as a lack of resources, mismatch of teaching content with the needs of the labor market and insufficient individualization of the approach to students. Traditional methods do not always contribute to maximum learning of the material and development of the necessary skills in students.

One of the main advantages of using AI in computer science teaching is the ability to create individualized educational programs. Machine learning algorithms can analyze each student's knowledge level and provide a personalized course that suits their needs and pace of learning. AI allows you to create personalized educational programs, taking into account the individual needs of each student. Machine learning algorithms can analyze the learning style, learning pace, and preferences of students, providing them with the optimal learning path.

AI can act as a virtual mentor, helping students solve problems by providing additional materials and explanations. Such systems can operate around the clock, providing access to learning resources at any convenient time. Interactive conversations with a virtual tutor can encourage active learning by giving students the opportunity to ask questions and receive instant answers.

Using AI, it is possible to automate the processes of assessing student work. This will not only save teachers time, but will also ensure objective and consistent assessment. Algorithms can analyze not only the correctness of answers, but also the process of solving a problem, which contributes to a deeper understanding of the material.

Artificial intelligence platforms make it possible to create solutions for analyzing pictures, understanding speech, and even making predictions, taking into account and simulating human

intellectual capabilities. They provide software products that can analyze input data and interpret the results obtained and make the process of human interaction with programs and assistance in decision-making within certain tasks more intuitive.

10 Best Artificial Intelligence Tools for Education :

Much of the talk about artificial intelligence (AI) tools is often aimed at businesses, but AI has enormous potential to radically improve our educational systems. It is one of the most powerful tools teachers can have at their disposal and often frees them from administrative burdens. These technologies will not replace teachers, but will allow them to spend more time teaching students.

AI is growing rapidly in the education sector and is becoming a multi-billion dollar global market. This rapid growth is due to its ability to transform many aspects of teaching and learning processes. AI can create immersive virtual learning environments, create “intelligent content,” eliminate language barriers, bridge gaps between learning and teaching, create tailored plans for each student, and much more.

Many innovative companies are creating AI tools to achieve these results. Best AI tools for education:

Gradescope AI tool allows students to grade each other by providing feedback, which is often time consuming without AI technology. Gradescope relies on a combination of machine learning (ML) and AI to simplify grading, saving time and energy.

By outsourcing these tasks, teachers can focus on more important ones. Gradescope can be used by teachers to grade paper-based exams and online homework assignments, as well as prepare projects in one place. Fetchy tool - for teaching language arts and more. Fetchy is a generative AI platform designed specifically for educators. This allows teachers to reach their full teaching potential. They strive to achieve this by simplifying and streamlining the many tasks educators face, including creating engaging lessons, creating newsletters, creating professional emails, and more. Leveraging the power of artificial intelligence, Fetchy enables educators to improve their teaching methods, optimize time management, and make confident, informed decisions.

Fetchy specializes in customizing the generated language according to the requirements of teachers. Without the need to formulate complex prompts, Fetchy is readily useful to educators. When using Fetchy's custom solutions, educators can expect relevant results tailored to their specific educational requirements.

Cognii is another Boston-based company that develops AI-based products for K-12 and higher education institutions. It is also used in corporate training environments. One of Cognii's core AI tools is a virtual learning assistant that leverages conversational technology to help students form open-ended responses and improve critical thinking skills. Apart from this, the virtual assistant also provides personalized coaching and real-time feedback tailored to each student.

Ivy is a suite of AI chatbot tools specifically designed for universities and colleges. They help with many parts of the university process such as application forms, admissions, tuition fees, deadlines and more. Another unique feature of Ivy is the ability to plan recruiting campaigns based on the data collected. An AI tool can provide students with much-needed information



such as important information about loans, scholarships, grants, tuition fees, and more. It can be used in different departments thanks to the ability to develop specialized chatbots for each of them.

Another one of the best AI learning tools on the market is Knowji, an audio-visual vocabulary app that leverages current education research. Knowji is designed for language learners and uses a variety of methods and concepts to help students learn faster. The AI learning tool tracks the progress of each word and can predict when users are likely to forget it. These abilities are achieved through the use of a spaced repetition algorithm that allows students to learn better over time.

Using virtual environments to conduct hands-on activities allows students to gain experience by simulating real-life scenarios. Virtual laboratories and simulators help to consolidate theoretical knowledge in practice, raising the quality of training to a new level.

The use of AI in education raises ethical and privacy concerns. It is important to develop strict standards for the use of student data and ensure transparency in the operation of algorithms to avoid mistrust on the part of students.

The use of AI in teaching also raises ethical questions. It is important to develop standards for the use of student data, ensuring its confidentiality, and transparency in the operation of algorithms.

To successfully integrate AI into education, teacher training must be provided. They must be aware of the capabilities of technology and be able to effectively integrate it into the learning process.

The introduction of AI technologies requires appropriate training for teachers. Training educators to use new tools and techniques is becoming an important aspect of successfully implementing technological change.

The use of such tools contributes to the creation of more effective and interesting methods of teaching computer science, and can also increase student involvement in the learning process. Artificial intelligence opens up new horizons for teaching computer science, making the process more efficient, accessible and personalized. However, the implementation of these technologies requires careful consideration of ethical issues and teacher training. The promise of AI in education is inspiring the creation of innovative educational environments.

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