ADVANTAGES AND DISADVANTAGES OF USING ARTIFICIAL INTELLIGENCE (AI) IN ARCHITECTURAL APPLICATIONS

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Anotation: *Nowadays, the position of artificial intelligence is increasing all over the world. Almost Anotation: nowadays, the position of artificial intelligence is increasing all over the world. In almost every area we can see his intervention. This gives us a certain relief. Saving our time, for example, wants to know, allows us to find exactly and quickly the information we want to learn. In certain areas it can even do different things without human intervention. The main content of the article is such in the applications used in the field of architectand we can see its intervention in one field. This gives us a certain relief. Saving our time, for example, wants to know, allows us to find exactly and quickly the information we want to learn. In certain areas it can even do different things without human intervention. The main content of the article is to consider the good and bad aspects of artificial intelligence in the applications used in the field of architecture.*

Keywords: *architecture, artificial intelligence, application, construction.*

In architecture, the application of artificial intelligence (AI)provides many opportunities and new approaches, but there are also some negative aspects. Below are the importance and disadvantages of the use of (AI) in the field of architecture:

1. Speed up the design process:

 - With AI, design and project creation processes can be automated. This saves architects time and helps to achieve faster results.

2. Data analysis:

- AI is effective in analyzing Big Data (big data), helping to better understand the needs of customers.

3. Simulation and modeling:

- It is possible to anticipate the functioning of the building by simulating architectural projects. It is useful in assessing energy efficiency, environmental impact.

4. Personalization:

- Os performing a more individual approach to customers using artificial intelligence

. Efficient use of resources:

- Helps optimize the use of resources in the construction process, which reduces costs and reduces environmental impact.

When we take a look at the use of artificial intelligence in the AutoCAD program alone, we simply enter the dimensions of the rooms and information about the type of room, while the suniy intelekt does the rest of the work. With this, we can preserve the 40 minutes that go to design on average. In the rest of the architecture applications, it is also possible to save a lot of time using the same layout. Artificial intelligence (AI) can provide a number of useful opportunities and improvements for designers and engineers when applied to AutoCAD software. Below are some examples of potential applications of artificial intelligence in AutoCAD: automatic drawing: drawing processes can be automated using artificial intelligence. For example, draw simple geometric shapes or repeating elements automatically. Error detection: the program can help identify errors or inaccuracies in projects, which can save designers time in the process of work. Optimization: using artificial intelligence, it is possible to analyze various design options and offer the best solutions. This will help increase the effectiveness of the project. Recommendation systems: Si-based recommendation systems can offer users materials, techniques, or methods to match their work. Interactive help: creating interactive help and guides for users to help new programmers and designers learn faster. 3D modeling: opportunities for automatic

creation of complex shapes and structures can arise when creating 3D models through artificial intelligence. Data analysis: allows you to analyze the data collected to assess the success of projects and give forecasts for future projects. In general, when used in applications such as AutoCAD, artificial intelligence can greatly contribute to accelerating design processes, improving efficiency, and improving production.

The application of artificial intelligence in the 3D Max program can provide a number of useful opportunities. Below are some possibilities and results:Model building: complex 3D models can be created quickly and efficiently using artificial intelligence. For example, it is possible to automatically develop geometric shapes or structures using AI algorithms. Materials and textures: with artificial intelect, it is possible to automatically select and simplify the process of creating materials and textures. This can help create realistic materials, for example. Animation: AI helps speed up the animation process, such as automating actions or extracting the required frames for animation. Visualization: through artificial intelligence algorithms, the possibilities of high-quality visualization of scenes increase. This allows for real-time tracking of changes. Game and film development: in the 3D Max application, artificial intelligence can be used to speed up and improve the efficiency of creating new content for games or movies. Analysis and optimization: AI helps in analyzing and optimizing models, which saves time and increases efficiency. Therefore, the application of artificial intelligence in the 3d Max program serves to make creative processes more efficient and innovative.

Downsides:

1. Dependence on the human factor:

 - Artificial intelligence systems cannot completely replace human creativity and experience. Creativity and aesthetic concepts become more difficult to take into account.

2. Data dependence:

 - AI Systems will need large amounts of data, and if the data is incorrect or insufficient, the results can also be erroneous.

3. Security concerns:

- Artificial intelligence systems are associated with risks such as cyber attacks and data theft.

4. Impact on jobs:

- Some jobs may be lost as a result of automation, which is likely to cause social problems in the economy.

5. Ethics problems:

- Ethical issues may arise in the use of artificial intelligence, for example, the need to take into account the interests of humanity in making design decisions.

Conclusion. In general, artificial intelligence can be useful in many ways in architecture, but it is important to take into account its negative aspects as well. Architects and professionals should look for ways to make this technology more effective by applying it correctly. Artificial intelligence (AI) technologies are widely used in architecture and bring about a number of innovations and innovations in the field. AI assists in activities such as architecture process automation, design creation, simulation, and project management.

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