**3D MODELING**

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**Introduction. 3D modeling is the process of creating a three-dimensional representation of an object or scene using specialized software. This technology has revolutionized the world of design, allowing artists, engineers, and architects to create highly detailed and realistic models that can be used for a variety of purposes.**

**Objectives.** The main task of our article is to consider what 3D modeling is and all its features.

**Methods.** One of the primary benefits of 3D modeling is the ability to visualize and test designs before they are built. This allows designers to identify potential problems or flaws in their designs and make adjustments before any physical construction takes place. Additionally, 3D modeling can be used to create accurate prototypes that can be tested and refined before production begins, saving time and money in the long run.

3D modeling is widely used in a variety of industries, including architecture, engineering, product design, and entertainment. In architecture, 3D models can be used to create detailed plans and visualizations of buildings and landscapes, while in engineering, 3D models can be used to simulate the behavior of complex systems and machinery. Product designers use 3D modeling to create prototypes and visualizations of new products, while the entertainment industry uses 3D modeling to create stunning visual effects and realistic animations.

To create a 3D model, designers typically use specialized software such as Blender, SketchUp, 3DsMax, Maya or AutoCAD. These programs allow users to create objects and scenes using a variety of tools and techniques, including sculpting, polygonal modeling, and photogrammetry. Once a model is complete, it can be rendered into a 2D image or video using specialized rendering software.

**Conclusion.** 3D modeling is a powerful technology that has transformed the way we design and create. Whether you are an architect, engineer, product designer, or animator, 3D modeling can help you bring your ideas to life and create realistic models.

**References.**

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(рекомендовано до друку доц. Касянчук М., доц. Штохман Л.)