

IMPROVEMENT OF 3D GRAPHICS TECHNOLOGIES IN COMPUTER MODELING STUDIES

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Annotation

3D modeling is a very popular, developing and multi-functional direction in the computer industry today. The creation of virtual models of anything has become an integral part of modern production. Apparently, the release of media products is no longer possible without the use of computer graphics and animation. Of course, specific programs are provided for a variety of tasks in this area.

When choosing an environment for three-dimensional modeling, you must first determine the range of tasks that will suit it.

Keywords: modern production, three-dimensional modeling, program and the time spent

Introduction

In our review, we will also touch on the issue of the complexity of studying the program and the time spent on its adaptation, since working with three-dimensional modeling should be rational, fast and easy, the result should be qualitative. and as creative as possible.

Let's go to the analysis of the most popular 3D modeling programs.

Autodesk 3ds Max

The most popular representative of 3D-modellers remains Autodesk 3ds Max-This is the most powerful, functional and versatile application for 3D graphics. 3D Max is a standard in which many additional plugins have been released, Ready-made 3D models have been developed, gigabytes of courses on copyright law and video textbooks have been photographed. This program is the best place to start learning computer graphics.

This system can be used in all areas, from architecture and interior design to the creation of cartoons and animated videos. Autodesk 3ds Max is perfectly suited for static graphics. With its help, realistic paintings of internal, external and individual things are created quickly and technologically. Most of the 3D models that have been developed have been created in 3ds Max format, which confirms the product's compatibility and is considered to be its biggest plus. Cinema 4D is an application that is positioned as an opponent of Autodesk 3ds Max. The film has almost the same set of functions, but differs in the logic of work and methods of performing operations. For those who are accustomed to working on 3D Max and want to take advantage of Cinema 4D, this can be inconvenient.

Compared to its legendary competitor, Cinema 4D has more advanced video animation functionality, in addition to its ability to create more modern animated graphics. It is from

Cinema 4D, in the first place, its popularity is lower, so the number of 3D models for this program is much less than that of Autodesk 3ds Max.

For those who are taking their first steps in the field of Virtual sculpture, The Simple and interesting application of Sculptress is very suitable. With this application, the user immediately becomes involved in the process of sculpting a figure or character. Inspired by the intuitive creation of the model and the development of your skills, you can climb to the professional level of performance in more complex applications. The possibilities of sculptrix are enough, but not complete. The result of the work is to create a single model that will be used to work on other systems.

Materials and Methods

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I Clone is an application developed specifically for creating fast and realistic animations. Thanks to the large and high-quality library of Genesis, the user can get acquainted with the process of creating animations and acquire the initial skills in this type of creativity. Creating scenes in I Clone is easy and fun. In the stages of drawing a sketch is very suitable for the initial study of the film.

I Clone is well suited for learning and using simple or low budget animations. However, its versatility is not as wide and versatile as in Cinema 4D.

For construction, engineering and industrial design, AutoCAD from Autodesk is used - the most popular set of images. This program has the most powerful functions for two-dimensional drawing, as well as the design of three-dimensional parts with different complexity and purpose.

By learning how to work in AutoCAD, the user will be able to design complex surfaces, structures and other products of the material world and create working drawings for them. On the user side there is a Russian-language menu, a system of help and instructions for all operations.

This software should not be used for beautiful animations such as Autodesk 3ds Max or Cinema 4D. The element Autocad is the elaboration of working drawings and model, so it is better to choose a Sketch Up for the development of sketches, for example, architecture and design, for these purposes more suitable.

Sketch Up is an intuitive application for designers and architects, which can be used to quickly create 3D models of objects, structures, buildings and interiors. Thanks to the intuitive workflow, the user can reflect his idea very clearly and graphically. Sketch Up is the simplest solution used for modeling a 3d House.

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