

3D GRAPHICS: AUTODESK MAYA

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3D Graphics is a very popular technology nowadays, because of great role of visualization in the perception of information by people. And 3D graphics programs are my specialization.

3D computer graphics software refers to programs used to create 3D computer-generated imagery. 3D modelers are used in a wide variety of industries. Many 3D modelers are general-purpose and can be used to produce models of various real-world entities, from plants to automobiles to people. Some are specially designed to model certain objects, such as chemical compounds or internal organs.

Autodesk Maya (Sanskrit word for "illusion") is a high-end 3D computer graphics and 3D modeling and 3D animation software package originally developed by Alias Systems Corporation, but now owned by Autodesk as part of the Media and Entertainment division. Maya is used in the film and TV industry, as well as for computer and video games, architectural visualization and design.

Maya is a popular, integrated node-based 3D software suite.

NURBS, polygons and subdivision surfaces are available in Maya.

Polygons are a widely used model medium due to its relative stability and functionality. Polygons are also the visualization bridge between NURBS and SubDivs. NURBS are used for their ready-smooth appearance and respond well to deformations in the Dynamics Workbench. SubDivs resemble a combination of both NURBS and polygons, but they are actually just a smoothed mesh.

Maya features a particle system for handling masses like steam and water drops. Dynamic fields allow adding gravity, wind and vortexes, allowing for effects such as blowing leaves or even tornadoes. Special tools give artists the ability to brush and style particles like hair and fur.

An artist may create rigid body geometric objects which collide automatically without explicit animation, as well as soft body objects which can ripple and bend, like flags and cloth.

Maya effects are built-in programs that make it easy for users to create complex animation effects such as smoke, fire and realistic water effects, with many options and attributes for tuning the results.

Many popular computer-animated films have been made with Maya software.

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