International Conference on Multidisciplinary Studies in Education and Applied Sciences
Istanbul, Turkey
April 27th 2022   **conferencezone.org**

TECHNOLOGY OF CREATING CARTOON CHARACTERS ON THE BASIS OF 3D MODELS

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Abstract: We all love to watch bright, loving cartoons that sink into the atmosphere of a fairy tale. But how were these cartoons created? It is a long and arduous process involving a very large team of experts. But there are many programs with which you can create your own cartoon, drawing unique characters and interesting stories.

Keywords: Autodesk Maya, MODO, 3D Cartoons, Toon Boom Harmony, CrazyTalk, Anime Studio Pro, Pen

Autodesk Maya. One of the most powerful and popular programs for working with three-dimensional images and animations is Autodesk Maya. This program is often used by film industry professionals.

Autodesk Maya has a lot of toolkits, so it's very popular. With it, you can create real three-dimensional models using sculptural tools. The program also calculates the behavior of materials and creates the dynamics of soft and hard bodies.

In Autodesk Maya, you can create characters with real animation and action. You can assign any element of the model to any body element. You can control every member and every joint of the character.

Although it is very difficult to master the program, it is offset by the availability of a large amount of training material.

Autodesk Maya is the most advanced software for creating 3D cartoons.

MODO. Another powerful program for creating cartoons on a computer that is known for its speed. MODO has many tools for modeling and sculpture, as well as complete standard libraries that you can always fill with your own materials.

A distinctive feature of MODO is the ability to fully customize the program for yourself. You can create your own set of personal tools and set quick buttons for them. You can also create your own personal brushes and store them in libraries.

If we talk about the visualization of the models, then the image quality will not lag behind MODO Autodesk Maya. Currently, the program has one of the best visualizers for creating real images. The service can be operated automatically or by the user.

Toon Boom Harmony is the undisputed leader among animation programs. The software is primarily designed to work with 2D graphics and has many fun tools that make this job easier.

For example, a tool like Bones allows you to create character movements and control every element of the body. With it, you can animate a character without breaking it down into separate sections, saving you time.

Another feature of the program is the real pen mode, in which you can scan the drawn pictures on paper. Anyway, the process of drawing at Toon Boom Harmony has become much easier. For example, the ability to automatically align and merge lines, control pressure, and adjust each line allows you to create truly high-quality drawings.

CrazyTalk is a fun program for creating facial expressions that can be used to "talk" to any image or picture. Despite the simplicity of the program, it is often used by professionals.

CrazyTalk does not have many features. Here you simply upload the image and prepare it for animation. If you do not have a suitable image, then the program will offer to take a photo from the webcam. Then download the audio recording, place it on the video and the program itself will create the speech animation. You can also record sound from the microphone.

The program has standard libraries, where you can find ready-made models, audio recordings, as well as face elements that can be added to the image. Although libraries are small, you can fill them out yourself or download ready-made materials from the Internet.

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Anime Studio Pro. Here you can create your own full-fledged 2D cartoon. The peculiarity of the program is that it tries to facilitate the work of the user. There are a number of special tools and features for this.

For example, if you don't want to draw each character by hand, you can use a standard editor and assemble the character from ready-made elements. You can also manually finish the icon created in the editor.

Anime Studio Pro also has a Bones tool where you can create character movements. By the way, the program also has ready-made animated scripts for some actions. For example, you don't have to draw a step animation because you can use a ready-made script.

In general, the program is suitable for users who are already engaged in animation and similar programs. You can find several tutorials for the novice user.

Pen. Pencil is probably the easiest program to draw cartoons. The familiar interface from Paint makes it easy to create animations. Here you will not find a variety of tools like the programs mentioned above, but you will definitely get used to it quickly.

The program supports multi-layer and frame-by-frame animation. That is, you have to draw each square by hand. To create an animation, drag the time bar slider and select the desired frame

Of course, the pen is not suitable for large projects, but here you can draw small short cartoons.

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