

Entertainment – “Shrek”

SAMPLE OF COMPUTER GRAPHICS APPLICATION

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INTRODUCTION

This is the first review partial assignment that was given for the subject of Fundamental of Computer Graphics (SCSV 2213 – 01) dated on the 12th of February 2020. In this short report, we have selected a sample application of computer graphics in Animations in Films & Entertainment.

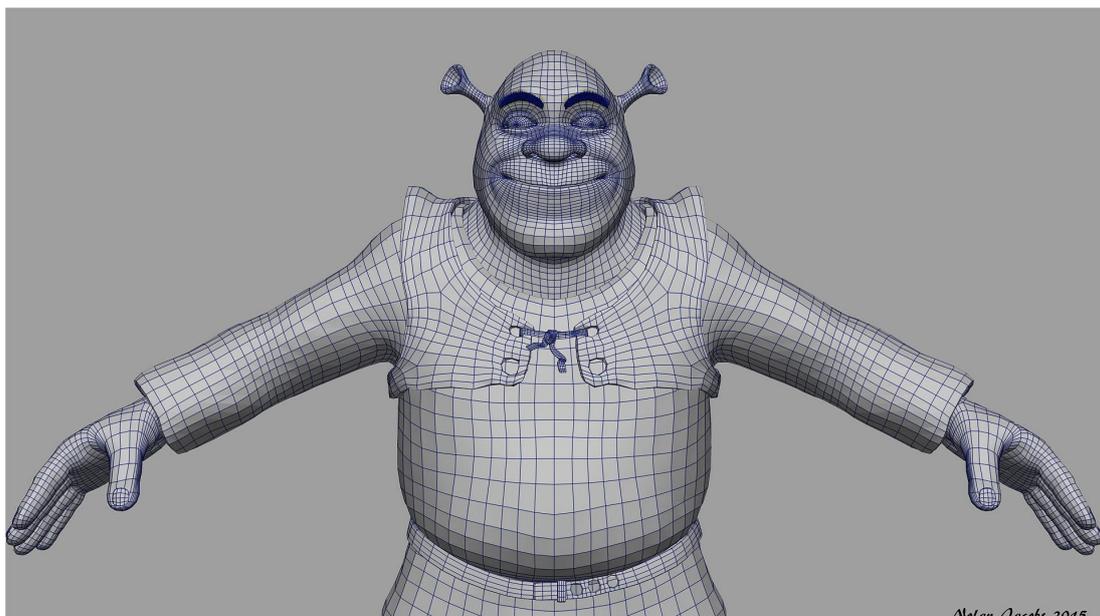
Computer graphics have a series of methods that are now commonly used to produce animations for a variety of applications. In the entertainment industry, computer graphics is used in motion pictures and cartoons.

Hence, we studied some reference to the making of the animation “Shrek” while focusing on the discussion on how computer graphic was used in the animation of this film. The outline of our short report is as follows; Section 1 discusses how computer graphic was used for animation, Section 2 highlights the terms found in computer graphic animation and the last section is the conclusion.

HOW COMPUTER GRAPHICS WAS USED FOR ANIMATION

Animation is just a word to describe giving life to computer graphic. It brings life to almost all inanimate objects by injecting power and emotions to them. Computer-assisted animation and computer-generated animation are two categories of computer animation. Computer animation is divided into two parts. The first one is computer-generated animation and the other one is computer-assisted animation. The computer graphics can be operated by video or film.

The simple idea of animation can be put as a play back of the recorded images at rates fast enough to bluff all human eye into convincing them that the recording is on continuous motion. Animation can easily make a sequence of dead images come to life. Animation is often used in the entertainment industry, computer aided-designs, scientific visualization, education and computer art.



Building a character's skeletal mesh



The finished character which was used in the movie

COMPUTER GRAPHICS ANIMATION TERM

1. Animation Sequence

A single animation asset that can be played on a skeletal mesh.

2. Skeletal Mesh

A set of polygons composed to make up the surface of a class of mesh that can be animated.

3. Facial Animation

An area of computer graphics that captures and uses methods and techniques for generating and animating images or models of a character face.

4. Static Modelling

A static model describes the static structure of the system being modeled, which is considered less likely to change than the functions of the system.

5. Photorealism

A genre of art that includes painting, drawing and other graphic media, where artists study a photograph and then attempts to reproduce the image as realistically as possible but using a different medium.

CONCLUSION

Computer graphics animation is widely used in the Films and Entertainment Industry especially the animation of “Shrek”. Computer graphics has an unspeakably large impact in most media. It has not only transformed movies and animations, but also video games, advertising, and graphics design.

ACKNOWLEDGEMENT

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REFERENCES

1. From Chapter 1 of Computer Graphics with OpenGL®, Fourth Edition, Donald Hearn, M. Pauline Baker, Warren R. Carithers.
2. Vitecks, “Creating a Fairy Tale World, The Making of Shrek”, Youtube, 8th September 2018, Retrieved from <https://www.youtube.com/watch?v=Vb-mr14EQhA>
3. Tutorials Point, Computer Animation, Computer Graphics, © 2020, Retrieved from https://www.tutorialspoint.com/computer_graphics/computer_animation.htm
4. Epic Games Inc, Skeletal Mesh, Computer Graphics, © 2004 - 2020, Retrieved from https://wiki.unrealengine.com/Matinee_Basics:_Skeletal_Meshes
5. Epic Games Inc, Animation Sequences, Computer Graphics, ©2004-2020, Retrieved from <https://docs.unrealengine.com/en-US/Engine/Animation/Sequences/index.html>
6. Wikipedia, Photorealism, © 22nd January 2020, Retrieved from <https://en.wikipedia.org/wiki/Photorealism>
7. Daniel Kurland, (2018, July 25th), “26 Crazy Revelations Behind The Making of Shrek”, Retrieved from <https://screenrant.com/shrek-dreamworks-behind-scenes-hidden-trivia/>