**Chapter 1**

**INTRODUCTION**

**1.1 Introduction to computer graphics and opengl**

**COMPUTER GRAPHICS** is concerned with all aspects of producing pictures or images using a computer. The field began humbly almost 50 years ago, with the display of a few lines on a cathode-ray tube (CRT); now, we can create images by computer that are indistinguishable from photographs of real objects. We routinely train pilots with simulated airplanes, generating graphical displays of a virtual environment in real time. Feature-length movies made entirely by computer have been successful, both critically and financially. Massive multiplayer games can involve tens of thousands of concurrent participants [1][2].

VISUALIZATION is any technique for creating images, diagrams or animations to communicate a message.

**Application of Computer Graphics**

* Display of information
* Design
* Simulation and animation
* User interfaces