

# Digital art

Science, Computer Science



Digital art is a general term for a range of artistic works and practices that use digital technology as an essential part of the creative and/or presentation process. Since the 1970s, various names have been used to describe the process including computer art and multimedia art, and digital art is itself placed under the larger umbrella term new media art.

The impact of digital technology has transformed activities such as painting, drawing and sculpture, while new forms, such as net art, digital installation art, and virtual reality, have become recognized artistic practices. More generally the term digital artist is used to describe an artist who makes use of digital technologies in the production of art. In an expanded sense, "digital art" is a term applied to contemporary art that uses the methods of mass production or digital media. There are two main paradigms in computer generated imagery.

The simplest is 2D computer graphics which reflect how you might draw using a pencil and a piece of paper. In this case, however, the image is on the computer screen and the instrument you draw with might be a tablet stylus or a mouse. What is generated on your screen might appear to be drawn with a pencil, pen or paintbrush. The second kind is 3D computer graphics, where the screen becomes a window into a virtual environment, where you arrange objects to be "photographed" by the computer.

Typically a 2D computer graphics use raster graphics as their primary means of source data representations, whereas 3D computer graphics use vector graphics in the creation of immersive virtual reality installations. A possible third paradigm is to generate art in 2D or 3D entirely through the execution

of algorithms coded into computer programs and could be considered the native art form of the computer. That is, it cannot be produced without the computer. Fractal art, Data moshing, algorithmic art and Dynamic Painting are examples.