

Development of Computer Graphics

- 1951
 - Whirlwind, Jay Forrester (MIT)
 - CRT displays
- mid 1950s
 - SAGE air defense system
 - command & control CRT, light pens
- late 1950s
 - Computer Art, James Whitney Sr.
 - Visual Feedback loops
- 1962
 - Sketchpad, Ivan Sutherland
 - data structures, light pen for drawing and choices

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1

Development of Computer Graphics

- 1964
 - CAD and CAM
 - General Motors DAC, Itek Digitek
- 1964-1970s
 - Photorealism at University of Utah
 - Sutherland, Evans, Catmull, Blinn
- 1969
 - Evans & Sutherland
 - commercial company - flight simulators
 - 3D vector pipeline, matrix multiplier, clipping
- 1974-1977
 - Catmull - computer graphics at NYIT
 - computer animation

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2

Development of Computer Graphics

- 1977
 - 3D Core Graphics System, first standard
 - ACM SIGGRAPH, Foley, Van Dam, Feiner
 - baseline specification
- 1982
 - Clarke, Geometry Engine
 - IRIS - Integrated Raster Imaging System, SGI
- 1982
 - TRON, Star Trek - Genesis Effect

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Development of Computer Graphics

- 1982
 - Ray Tracing, Turner Whitted
- 1983
 - VRAM, Video random access memory, Texas Instruments
- 1983
 - Fractals
- 1985
 - Radiosity, Don Greenberg (Cornell)
- 1988
 - GKS, Graphical Kernel System

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Development of Computer Graphics

- 1988
 - PHIGS, PHIGS+
 - Programmer's Hierarchical Interactive Graphics System
- 1993
 - OpenGL - Open Graphics Library
 - derived from SGI's GL library
- 1993
 - Open Inventor, OO layer on OpenGL
- 1995
 - QuickDraw 3D, Apple
- 1995
 - Direct3D, Microsoft, game playing API

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