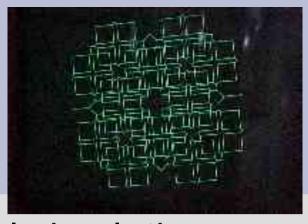
Short History of Computer Graphics

Early 60's:



- Computer animations for physical simulation;
 Edward Zajac displays satellite research using
 CG in 1961
- 1963: Sutherland (MIT)
 Sketchpad (direct manipulation, CAD)
 Calligraphics (vector) display devices
 Interactive techniques
 First mouse (Douglas Englebart)
- 1968: Evans & Sutherland founded
- 1969: First SIGGRAPH





- Utah Dynasty
 - 1970: Pierre Bezier develops Bezier curves
 - 1971: Gouraud Shading
 - 1972: Pong (first computer game) developed
 - 1973: Westworld, the first film to use computer animation
 - 1974: Ed Catmull develops z-buffer (Utah)
 First Computer Animated Short, *Hunger* Keyframe animation and morphing.
 - 1975: Bui-Toung Phong creates Phong Shading (Utah)
 Martin Newel models a 3D teapot with Bezier patches (Utah)

Mid 70's -80's:



- Quest for realism. Radiosity shading; mainstream real-time applications.
 - 1982: Tron, Wrath of Kahn. Particle systems and obvious CG.
 - 1984: The Last Star Figher, CG replaces physical models. Early attempts at realism using CG.
 - 1986: First CG animation nominated for and Academy Award: Luxo Jr. (Pixar)
 - 1989: Tin Toy (Pixar) wins Academy Award.

 1995: Toy Story (Pixar/Disney), the first full length fully compute rgenerated 3D animation.
 The first fully 3D CG cartoon Babylon 5. First TV show routinely using CG models.



Late 90's:

 Interactive environments, scientific and medical visualization, artistic rendering, image based rendering, path tracing, photon maps, etc.

2000's:

 Real-time photorealistic rendering on consumer HW? Interactively rendered movies? Ubiquitous computing, computer vision and graphics.