Apple

# 3D Design and Graphics

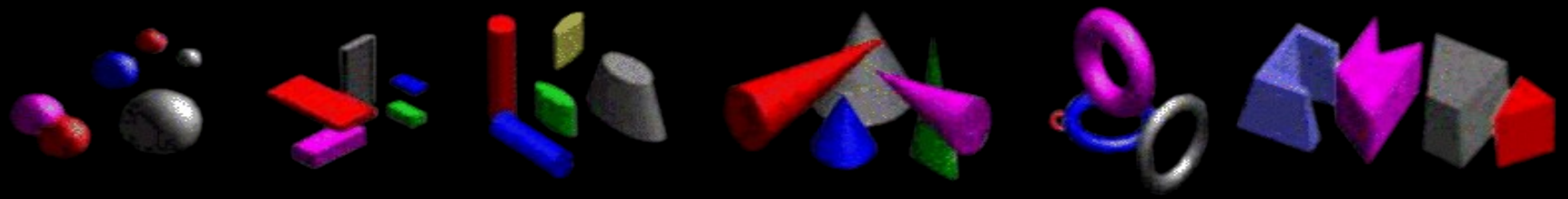
# Creative People

**Why they prefer Macintosh for their 3D work**

- Used by 3D graphics professionals
  - Animators, architects, designers, scientists, engineers, and more
- Hardware and software integration
  - Graphics and multimedia
- Mac OS
  - Legendary ease of use, user interface
- Plug-and-play simplicity
  - Expansion cards and peripherals

# 3D on Macintosh

- Advertising
- Architecture
- Web Design
- CAD/CAM
- Environmental Design
- Graphic Design
- Game Creation
- Industrial Design
- 3D Modeling and Animation
- Medical
- Scientific and Engineering
- Film and Digital Video



# Evolution of Macintosh

**Growth of Macintosh and the Mac OS**

- Wide selection of great 3D applications
- Improved processor speeds
  - Power of PowerPC
- Hardware graphics acceleration
  - ATI graphics chips
- Mac OS support of OpenGL
  - Industry-standard graphics libraries

# Faster and Easier

**Innovation for the creative professional**

- Elegant, powerful hardware
  - Power Macintosh, iMac, PowerBook
- Editor's Choice Award
  - Best Hardware—3D Design magazine
- Faster I/O
  - Ethernet, USB, FireWire, PCI
- Mac OS built-in features
  - OpenGL, QuickTime, AppleScript, File Sharing, Sherlock

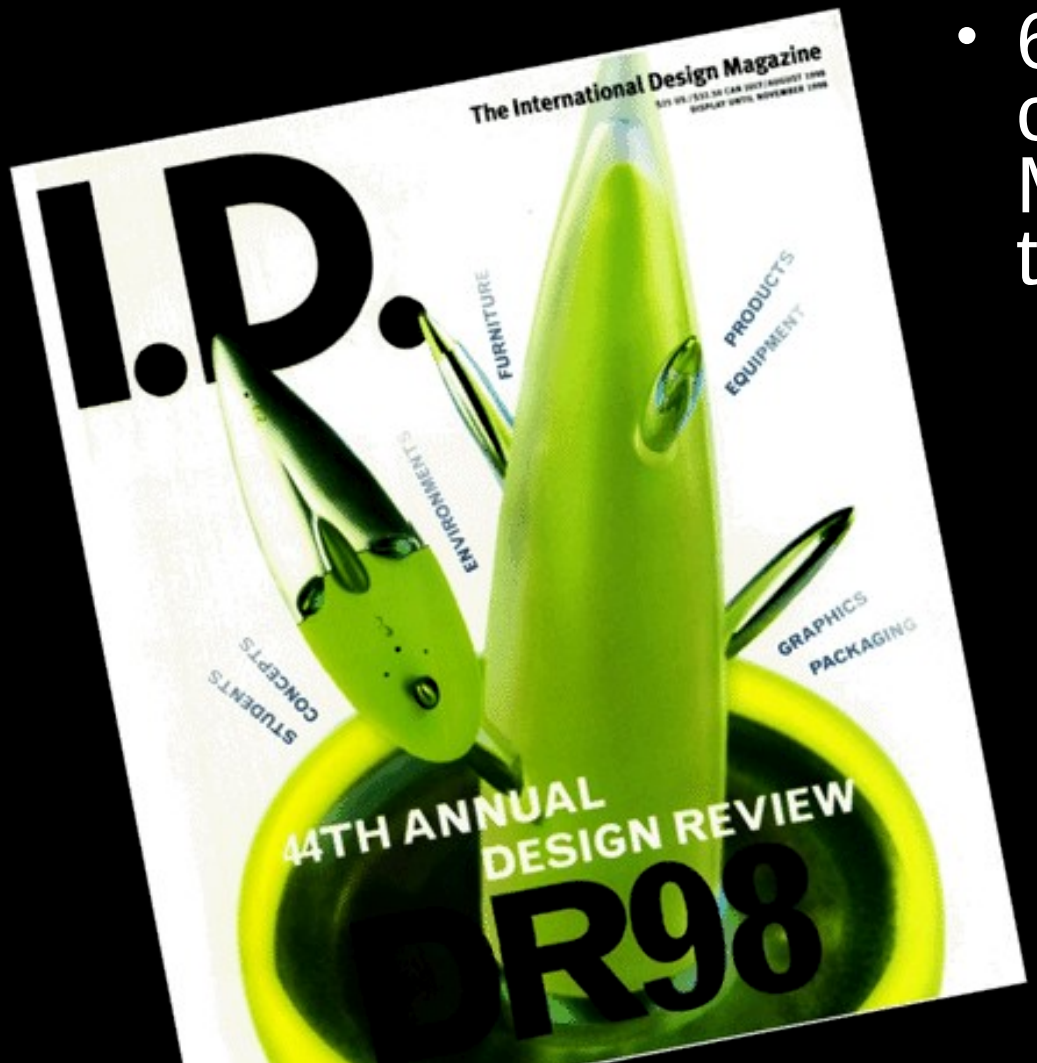
# Editor's Choice Award


Editors of 3D Design magazine selected the Power Macintosh G3 and the PowerBook G3 as *"the"* machines to use for 3D work.

"In this case, Apple was the only hardware system."

–Robert Melk
Publisher, 3D Design

# I.D. Magazine
## 44th Annual Design Review




- 69 winners in 8 categories used a Macintosh computer in their design work:
  - Consumer Products
  - Graphics
  - Packaging
  - Environments
  - Furniture
  - Equipment
  - Concepts
  - Student Work

# Enhanced Graphics Acceleration

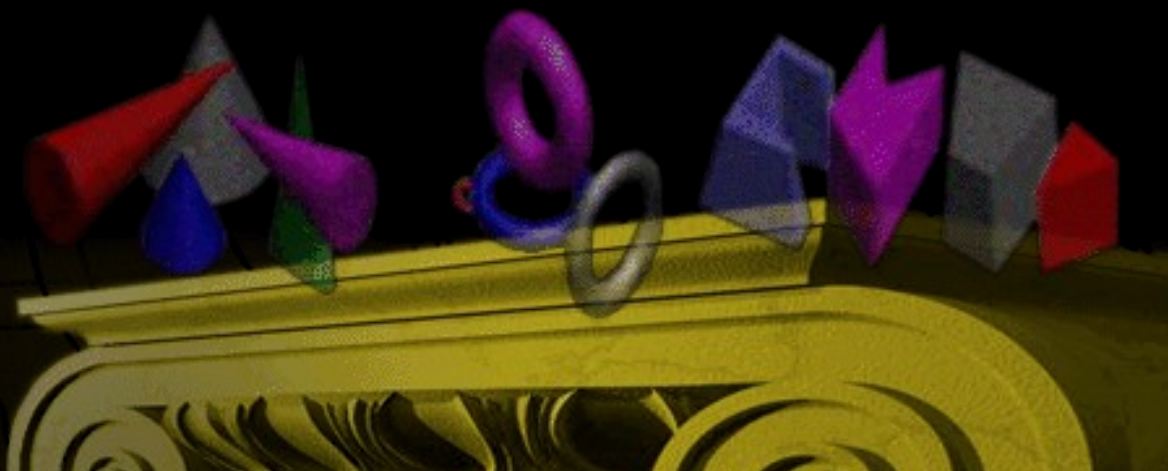
- ATI RAGE and RAGE II Macintosh systems
  - Hardware-based acceleration
- Faster rendering and animation
- Enables special effects and larger screens
- Multiple monitor support

# Impact of OpenGL

- Mac OS support of 3D libraries
- OpenGL available on every major OS
- Next generation of applications
  - More powerful applications will debut on Macintosh

# 3D Applications for...

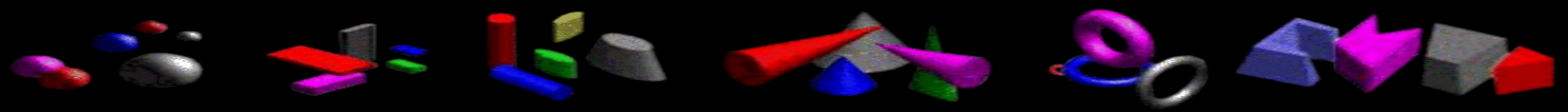
- 3D Modeling and Animation
- CAD/CAM
- Graphic Design
- Modeling
- Rendering
- Web Design
- Scientific and Engineering



# Applications for…

## 3D Modeling, Rendering, and Animation

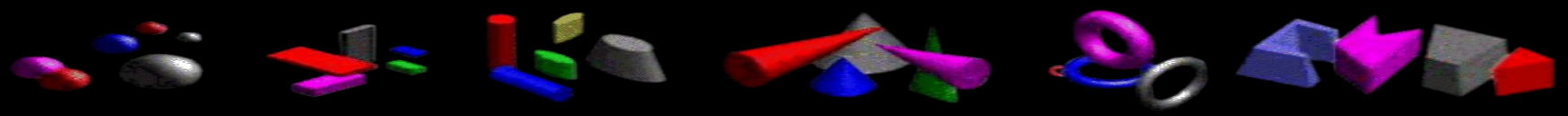
- Animation Master – Hash
- The Animation Stand –Linker Systems
- ElectricImage –Play
- Lightwave 3D – NewTek
- Amorphium –Play
- Sculpt 3D –Byte by Byte
- Art•Lantis Pro –Abvent
- form•Z –auto•des•sys
- Studio Pro 3D – Strata
- Cinema 4D –Maxon
- Poser –MetaCreations
- Ray Dream Studio –MetaCreations
- Amapi 3D –TGS
- Bryce 3D – MetaCreations



# Applications for...

## CAD (Computer-Aided Drafting or Design)

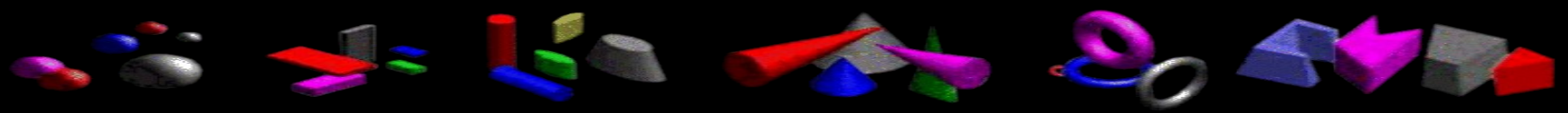
- ArchiCAD –Graphisoft
- ArchiDesign –BAGH
- DenebaCAD –Deneba
- MicroStation –Bentley Systems
- VectorWorks –Diehl Graphsoft
- Vellum –Ashlar
- Douglas CAD –*Douglas Electronics*
- Turbo CAD –IMSI
- Arc+ –ACA Ltd.
- DigiCad –Interstudio
- CAMM-3 3D –Roland Digital Group



# Applications for...

## Scientific and Engineering

- Alchemy 2000 –Tripos
- Chem 3D – CambridgeSoft
- CAChe –Oxford Molecular
- Maple V –Waterloo Maple
- Mathematica –Wolfram
- IDL –Research Systems
- Chemistry 4D – ChemInnovation
- Sculpt –Interactive Simulations
- IGOR Pro –Wavemetrics
- MultiFrame 4D –Daystar Software
- MacMolecule –Molecular Ventures
- Neoform –Formation Design Systems



# Additional Benefits of Macintosh

- QuickTime and QuickTime VR


- Plug-and-play expansion and peripherals
  - USB, FireWire, Ethernet, PCI slots



- OpenGL 3D libraries in the Mac OS

# Apple 3D Advantages


- PowerPC
  - Powerful new PowerPC hardware

- Mac OS
  - Comprehensive, integrated, and expansive


- 3D Graphics Acceleration
  - Now available in every Macintosh

- Applications
  - More powerful and creative applications available

# Access to More Information

- Apple 3D web site
  - www.apple.com/publishing/3D
- Macintosh Products Guide
  - www.apple.com/guide

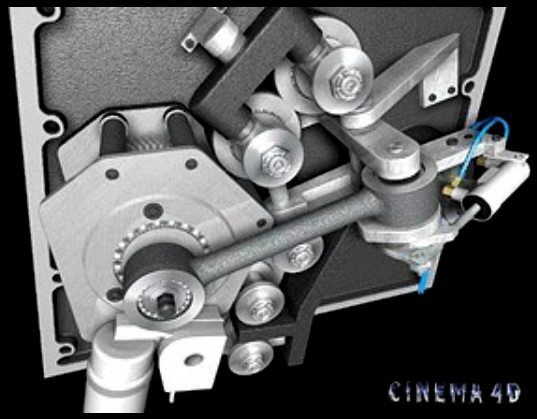
# Think different.

# Q&A

# Credits


"Ionic Capital" © David Johnson, 1992
using Sculpt 3D from Byte by Byte software

© Real Time Visualizations, 1999
using form•Z from auto•des•sys, Inc.

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using Cinema 4D by Maxon