

▶ **Multimedia Computing Overview**

▶ **What is multimedia computing?**

- ▶ Cannot be defined by its look alone.
 - ▶ Computers are above all flexible—used for many different applications, yielding many different “looks”.
- ▶ Can best be defined by the process involved:
 - ▶ Mimicking of traditional techniques.
 - ▶ Painting (mixing colors on a “palette”)
 - ▶ Drawing (using stylus and tablet like pencil and paper)
 - ▶ Used in conjunction with traditional media.
 - ▶ Jewelry: computer design, traditional casting.
 - ▶ Textiles: computer pattern, conventional silkscreening.
 - ▶ Sculpture: computer modeling and structural analysis, conventional construction.
 - ▶ Opening up altogether new artforms.
 - ▶ Robots, interactive installations.
 - ▶ Simulated 3D objects—unaffected by material constraints
 - ▶ **Interactive multimedia**—a collaboration between author and viewer

▶ **Multimedia computing evaluation**

- ▶ Problems:
 - ▶ Requires substantial investments—capital, training.
 - ▶ Ill-defined and changing rapidly—skills may be short-lived.
- ▶ Benefits:
 - ▶ Allows artist to easily back out and retrace steps—increased willingness to experiment.
 - ▶ Previous materials can easily be re-used—entire body of work is kept alive and evolving.
 - ▶ Speeds up execution—more time for creative thinking, alternative solutions can be explored more thoroughly.
 - ▶ Can provide extreme control over fine details. Also, can extend the artist’s control to additional steps in the production process.
 - ▶ Can be used to specify general characteristics of the work — while minor aspects are filled in automatically.
- ▶ Current applications:
 - ▶ Photography: complements and extends darkroom techniques, may eventually replace film.
 - ▶ Graphic design: keyline and pasteup, illustration, typesetting, are increasingly performed on computers—for all types of print materials, from daily newspapers to paper napkins.
 - ▶ Filmmaking: permits wider variety of effects with greater control. Has been employed exclusively on some projects.
 - ▶ Architecture: gives designers and clients the opportunity to visit a proposed building and quickly modify the blueprints in response to what they see.
 - ▶ **Interactive multimedia**: varying combinations of all of the above, and then more...
 - ▶ Training/Education/Edutainment
 - ▶ Reference
 - ▶ Commerce
 - ▶ Entertainment