A Survey of Color for Computer Graphics

Maureen Stone
StoneSoup Consulting

Color in Computer Graphics
**Color Vision**

How we see color

**Colorimetry**

How to measure color

**Image Capture**

2D “picture” of scene
Array of pixels

**Image Reproduction**

Display picture
Match original scene
Reproductions match too
Models and Systems

Rendering and representation
- Physical vs. designed
- Spectral vs. RGB

Color selection and design
- Models and tools
- Visual design
- Information design

To RGB or not RGB?
That is the question

Overview

Color vision and appearance

Color media
- Color production & reproduction
- Color management systems

Computer graphics
- Representations
- Systems issues
Topics for later

Color selection
- Interactive tools
- Color names

Color design
- Visual design
- Information design