

CSCI-4967: Three-Dimensional Computer Graphics
Class 17: October 28, 2004
Ray Tracing

Announcements

- Yogi will be holding his office hours 1:00–2:00pm on Thursdays.

Today's Class

We will look at *Ray Tracing*, which is a popular global illumination method for rendering images with transparent surfaces, shadows, etc.

1. Ray tracing: forward ray tracing, recursive ray tracing
2. Recursive ray tracing algorithm
3. Intersection computations for ray tracing, and efficiency issues

Reading

Chapter 10.11 of Hearn and Baker.

For a description of techniques used in “Fiat Lux”, see <http://www.debevec.org/FiatLux/> and <http://www.cs.berkeley.edu/~debevec/Items/NewScientist/>.

Activity

Download and play with the POV-Ray ray tracer at www.povray.org.

Next Class

Visible surface detection.