CSCI-4962: Three-Dimensional Computer Graphics
Class 23: November 14, 2002
Fractals

Announcements

- Project 4 is due on Monday, December 2.
- Homework 5 will be due on Monday, November 25.

Today's Class

We will first complete our discussion of *ray tracing*.

1. Recursive ray tracing algorithm
2. Intersection computations for ray tracing, and efficiency issues

We will then look at *fractals* for modeling natural (and some unnatural) objects.

1. Fractal objects
2. Deterministic self-similar fractals (see `sierpinski2d.cpp` and `sierpinski3d.cpp`)
3. Fractal dimension
4. Statistical self-similarity, and Midpoint subdivision for terrain generation

Reading

Chapter 13.1–13.3 (ray tracing) and Chapter 11.7 (fractals) of the Angel textbook.

Next Class

Fractals (continued).