

CSCI-4962: Three-Dimensional Computer Graphics
Class 20: November 4, 2002
Texture Mapping, Visible Surface Detection

Announcements

- Homework 4 will be available on the course web page later today.

Today's Class

We will continue our discussion of texture mapping techniques, before moving on to *visible surface detection*.

1. Texture mapping
 - (a) 3D texture mapping
 - (b) Procedural texturing
 - (c) Environment mapping
2. Visible surface detection
 - (a) Back face culling
 - (b) Z-buffer algorithm
 - (c) Depth sorting (Painter's algorithm)

Reading

Chapters 7.6–7.8 and 8.8 of the Angel textbook.

Chapters 9 (environment mapping) and 10 (depth buffer) of the OpenGL red book.

Activity

For more information on procedural texturing, see <http://www.kenperlin.com/talk1/>

Next Class

Visible surface detection (continued), and Ray tracing.