CSCI-4962: Three-Dimensional Computer Graphics
Class 16: October 21, 2002
Surfaces

Today's Class

We will begin our discussion of surfaces by looking at spline surfaces, and continue on to other popular surface representations.

1. Spline surfaces
   (a) Bezier surfaces (see `bezmesh.cpp` and `bezsurf.cpp`)
   (b) Bezier surfaces case study: Utah teapot (see `teapot.cpp`)
   (c) B-spline and NURBS surfaces
2. Polygon mesh surfaces
3. Quadric and superquadric surfaces

Reading

Chapters 10.1.5, 10.4.2, 10.6.2, 10.7.3, 10.9.4, 10.10–10.12 of the Angel textbook.
Chapter 12 of the OpenGL red book.
The Origins of the Teapot by Frank Crow, and *What, Teapots Again?* by Jim Blinn.

Activity

See `www.sjbaker.org/teapot/` for more info on the Utah teapot

Next Class

Solid modeling.