CSE 477/598, S 2012

Introduction to 3D Modeling

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Class web page (public site):


Syllabus

The class will cover material from The Essentials of CAGD Francis-Taylor. The course deals with computational modeling of objects such as curves outlining a font (Bezier and B-spline curves), surfaces such as the hood of a car (triangle meshes or NURB surfaces) or a human brain (volumetric models). Shape modeling techniques (interactive modifications, volume deformations) will be taught as they arise in many fields such as CAD/CAM, computer animation, or medical imaging. This class is aimed at giving students a solid foundation of topics in the field, enabling them to move on to graduate work or to utilize their skills in the workplace.

Objectives

Students will learn fundamental 3D modeling concepts. Students will be able to analyze problems and provide practical solutions. Students will be able to complete projects independently.

Materials covered, Projects, Exams (public site):


Text, required

Essentials of CAGD. G. Farin and D. Hansford. AK Peters.
The above web site contains pointers to pages in the book, so students see what was covered on any given day.