Informatik-Kolloquium

Rheinisch-Westfälische Technische Hochschule Aachen
Lehrstuhl für Informatik VIII

EINLADUNG

Zeit: Montag, 18. Februar 2002, 14.00 Uhr

Ort: Seminarraum 6317, Ahornstr.55

Referent: Frederic Cazals, Projet Prisme, INRIA Sophia-Antipolis, France

Thema: Sampled surfaces: from point clouds to triangulated surfaces

Abstract:

Surface Reconstruction is the process which consists of turning a 3D point cloud into a surface, either triangulated, defined implicitly, or defined parametrically. This talk will overview recent Surface Reconstruction results from the Computational Geometry community. The main characteristics of these contributions are, under some hypothesis to be discussed, to provide efficient yet provably good solutions to surface reconstruction problems. The talk will consist of two main parts. To begin with, we will survey the ---too often mixed up--- notions of Medial Axis and Skeleton. In particular, we shall use the medial axis to define good samples for smooth surfaces. Next, we will discuss coordinate systems and their application to surface reconstruction using the so-called natural interpolation method. In doing so, we will browse through other reconstruction methods and their difficulties. A software demonstration will conclude (or open!) the talk.

Es laden ein: Die Dozenten der Informatik