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- Publications
- Center for Biomedical Computing
- Projects
- Available Master's topics
- Intranet
- People

CBC Talk on Surface Interpolation for Detail Restoration - October 12, 2009



10:00 - 10:20 Surface interpolation for detail restoration

by Fredrik Andersson

Total number of participants: 9
 Total number of guests outside of CBC: 3
 Number of different nationalities represented: 2
 Total number of speakers: 1
 Total number of talks: 1

Abstract:

An increasingly important tool in the automotive and manufacturing industry is virtual product realization. One challenge here is real-time simulation of deformation of thin 2-dimensional objects, such as metal sheets and rubber grommets. The undeformed shape of these objects are often defined by importing a high detail CAD model. In order to meet the real-time simulation requirement the calculations needs to be carried out with respect to a coarse representation of the object. For each simulation step the resulting (coarse) representation of the deformed object then needs to be visualized with the high detail of the original CAD model. The aim of this thesis is to investigate how to recreate the original detail of a two- dimensional object out of a deformed coarse representation of it. The proposed method uses local surface interpolation to map points from the detailed representation back onto the coarse representation after simulation.

What	▪ Talk
When	Oct 12, 2009 from 10:00 AM to 10:20 AM
Where	Bakrommet
Contact Name	Tom Atkinson
Attendees	Fredrik Andersson Are Magnus Bruaset Xing Cai Hannibal Fossum Glenn Lines Harald Osnes Ola Skavhaug Karen H. Støverud Joakim Sundnes
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