Work in Progress Framework for Real-Time Simulations Anders Backman VRlab/HPC2N

Abstract

Virtual Environments (VE) as well as games has traditionally been pre-scripted and or pre-animated. Interacting with an animated environment can be hard due to the explicit actions that have been introduced into the environment.

With more and more CPU power and recent breakthroughs in real-time physical simulation methods, it now has been possible to incorporate complex physical structures in the VEs.

This talk will describe a work in progress at VRlab, where the aim is to develop a simulation framework for interactive real-time physical simulations. It will also touch the benefits of using real-time physical simulation when it comes to authoring of the VE as well as interacting in it.

An application, the Haptic Wheelchair will be presented, using the existing framework.