



Diplomanden- und Doktorandenseminar
des Instituts für Informatik

Thinning Mesh Animations

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Three-dimensional animation sequences are often represented by a discrete set of compatible triangle meshes. In order to create the illusion of a smooth motion, a sequence usually consists of a large number of frames.

We propose a pre-processing algorithm that considerably reduces the number of frames required to describe the whole animation. Our method is based on Batch Neural Gas, a new clustering and classification approach that can be used to automatically find the most relevant frames from the sequence. The meshes from the original sequence can then be expressed as linear combinations of these few key-frames with small approximation error.

The key-frames can finally be compressed with any state-of-the-art compression scheme. Overall, this leads to improved compression rates as the number of key-frames is significantly smaller than the number of original frames and the storage overhead for the reconstruction weights is marginal.

Dienstag, den 02.12.2008

14:00 Uhr in Hörsaal T 1, Hörsaalgebäude,
Albrecht-von-Groddeck-Straße 7