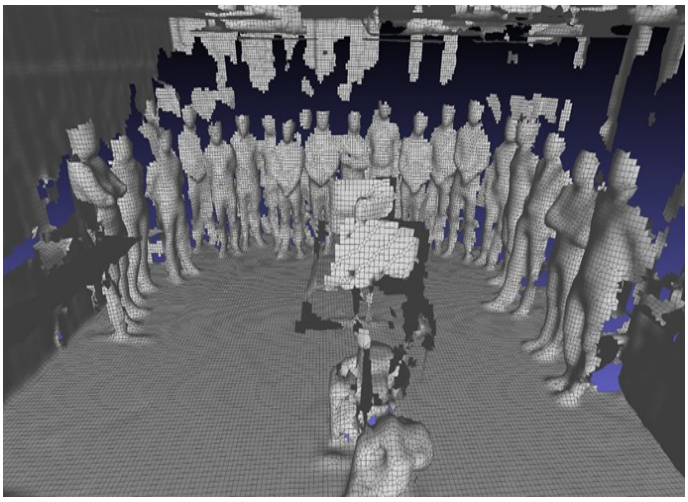
Visual Computing Colloquium
Friday, July 5th, 2019, 13:00pm
Visual Computing Lab C061

Massively Parallel Geometry Processing

Prof. Dr. Michael Guthe
University Bayreuth, Germany

Abstract
Traditional geometry processing is almost always based on sequential algorithms and corresponding data structures for neighbourhood queries. However, if one considers the parallel processing of polygon meshes, it quickly becomes clear that some of the techniques of traditional algorithms have to be questioned.
In this talk, the problems and possibilities of transferring sequential polygon mesh algorithms and data structures to parallel computing architectures will be examined. The advantages and challenges of parallel processing will be discussed using the example of compression, generation and simplification of triangle meshes.

Michael Guthe is a full professor at the University of Bayreuth and the head of the Visual Computing Group. His research is focused on computer graphics, image processing and their links to artificial intelligence**.**
He received a Ph.D. in computer science at the Computer Graphics Group of the Institute for Computer Science II of the University of Bonn, Germany. He was a Junior-Professor for Practical Computer Science at the University of Marburg, Germany.



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