Visual Computing Colloquium
January 11, 2019, 2PM

Realistic Virtual Humans for VR and Medicine

Abstract:
Digital models of humans are frequently used in computer games or the special effects movie industry. In this talk I will first describe how to efficiently generate realistic avatars through 3D-scanning and template fitting, and demonstrate their advantages over generic avatars in virtual reality scenarios. Medical applications can also benefit from virtual humans. In the context of craniofacial reconstruction I will show how digital head models allow us to estimate possible face shapes from a given skull, and to estimate a person's skull from a surface scan of the face.

Prof. Dr. Mario Botsch
Bielefeld University

Friday, January 11, 2019, 2pm
Meeting Room C061

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Vita:
Mario Botsch is professor in the Computer Science Department at Bielefeld University, where he leads the Computer Graphics & Geometry Processing Group. He received his MSc in mathematics from the University of Erlangen-Nürnberg and his PhD in computer science from RWTH Aachen, and did his post-doc studies at ETH Zurich. The focus of his research is the efficient acquisition, optimisation, animation, and visualisation of three-dimensional geometric objects. He is currently investigating 3D-scanning and motion-capturing of humans, modelling and animation of virtual characters, and real-time visualisation in interactive virtual reality scenarios.