TECHNISCHE UNIVERSITÄT WIEN
Institut für Computergraphik und Algorithmen
Arbeitsbereich für Computergraphik

vr|vis zentrum für virtual reality und visualisierung forschungs-gmbh

OESTERREICHISCHE COMPUTER GESELLSCHAFT
AUSTRIAN COMPUTER SOCIETY

laden gemeinsam zum

GASTVORTRAG

Prof. Brian A. Barsky
University of California, Berkeley

"The BLUR Project at Berkeley: Algorithms for Computer Generated Imagery, Computational Photography, and Aiding Human Vision"

Abstract:

The multidisciplinary BLUR project at UC Berkeley combines computer graphics with optics, optometry, and photography. This research investigates mathematical models to describe the shape of the cornea and algorithms for cornea measurement, scientific and medical visualization for the display of cornea shape, mathematics and algorithms for the design and fabrication of contact lenses, simulation of vision using actual patient data measured by wavefront aberrometry, photo-realistic rendering algorithms for generating imagery with optically-correct depth of field, view camera simulation. This talk will present an overview of rendering algorithms for simulating depth of field found in photographs and of vision-realistic rendering algorithms for simulating a subject's vision. Recent work on correcting visual aberrations with computational light field displays will also be briefly introduced.

Biography:

Brian A. Barsky is on the faculty of the University of California, Berkeley where he is Professor of Computer Science and Vision Science, Affiliate Professor of Optometry, Member of the Joint Graduate Group in Bioengineering with the UCSF medical school, Member of the Berkeley Center for New Media, Member of Berkeley Institute of Design, and an Arts Research Center Affiliate. He holds degrees from McGill University, Cornell University, and the University of Utah. He is a Fellow of the American Academy of Optometry (F.A.A.O.).

Datum: 15. Mai 2014, 15:00 Uhr s.t.
Ort: TU Wien, Favoritenstr. 9, Stiege 3, Seminarraum Zemanek