TECHNISCHE UNIVERSITÄT WIEN
Institut für Computergraphik und Algorithmen
Arbeitsbereich für Computergraphik

OESTERREICHISCHE COMPUTER GESELLSCHAFT
AUSTRIAN COMPUTER SOCIETY

laden gemeinsam zum

GASTVORTRAG

Peter Sikachev
Moscow State University, Russia

“Photorealistic Techniques in Gemstone Rendering ”

Abstract:
Real-time photorealistic gemstone rendering has recently become a demanded field. Diamond CAD modeling is widely used for creating new diamond cuts. The cut designer should be able to observe diamond’s light reflection properties, such as brilliance (white reflected light through the top of a diamond) and fire (colored light reflected from within a diamond) while editing the shape of the gemstone. Besides, specialized software is needed for the advertisement video generation, since offline rendering of gemstones in 3DSMax of Maya takes huge amount of time.
This talk will be dedicated to several real-time techniques, used in the gemstone rendering. An image-based technique for glare rendering, a caustics rendering method, adapted for gemstones, and several finite lens aperture simulation techniques will be presented.

Biography:
Peter Sikachev graduated with honors from Moscow State University, Department of Computational Mathematics and Cybernetics in 2009. He conducted his R&D at MSU Graphics&Media Lab from 2006 till 2009. While working at the Lab, Peter published 3 papers at major international conference in Russia “GraphiCon”. Peter participated in many research projects related to photorealistic rendering, BRDF acquisition and rendering and GPU rendering.

Datum: 15. Jänner 2010 10:30 Uhr s.t.
Ort: TU Wien, Favoritenstr. 9, Stiege 1, 5. Stock, Seminarraum E186