Publications:

A comparison of reflectance properties on polymer micro-structured functional surface
Publication: Research - peer-review › Poster – Annual report year: 2017

A Monte Carlo simulation of scattering reduction in spectral x-ray computed tomography
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Augmented Reality Interfaces for Additive Manufacturing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

A variational study on BRDF reconstruction in a structured light scanner
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Evaluation of optical functional surfaces on the injection moulding insert by micro milling process
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Interactive Stable Ray Tracing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Modeling the Anisotropic Reflectance of a Surface with Microstructure Engineered to Obtain Visible Contrast after Rotation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

Process chain for fabrication of anisotropic optical functional surfaces on polymer components
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Scene reassembly after multimodal digitization and pipeline evaluation using photorealistic rendering
Publication: Research - peer-review › Journal article – Annual report year: 2017

Virtual reality inspection and painting with measured BRDFs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Designing for Color in Additive Manufacturing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Hybrid fur rendering: combining volumetric fur with explicit hair strands
Publication: Research - peer-review › Journal article – Annual report year: 2016
Interactive Appearance Prediction for Cloudy Beverages
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Interactive directional subsurface scattering and transport of emergent light
Publication: Research - peer-review › Journal article – Annual report year: 2016

Noninvasive particle sizing using camera-based diffuse reflectance spectroscopy
Publication: Research - peer-review › Journal article – Annual report year: 2016

On Practical Sampling of Bidirectional Reflectance
Publication: Research › Ph.D. thesis – Annual report year: 2017

Interactive Global Illumination Effects Using Deterministically Directed Layered Depth Maps
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Non-Invasive Assessment of Dairy Products Using SpatiallyResolved Diffuse Reflectance Spectroscopy
Publication: Research - peer-review › Journal article – Annual report year: 2015

Our 3D Vision Data-Sets in the Making
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Quality Assurance Based on Descriptive and Parsimonious Appearance Models
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

VirtualTable: a projection augmented reality game
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Addressing Grazing Angle Reflections in Phong Models
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Directional Dipole Model for Subsurface Scattering
Publication: Research - peer-review › Journal article – Annual report year: 2014

Photon Differential Splatting for Rendering Caustics
Publication: Research - peer-review › Journal article – Annual report year: 2014

Decomposition of Diffuse Reflectance Images - Features for Monitoring Structure in Turbid Media
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Pond of Illusion: Interacting through Mixed Reality
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Building an Orthonormal Basis from a 3D Unit Vector Without Normalization
Publication: Research - peer-review › Journal article – Annual report year: 2012

Digital Prototyping of Milk Products
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2012

Predicting the Appearance of Materials Using Lorenz-Mie Theory
Publication: Research - peer-review › Book chapter – Annual report year: 2012
Real-Time Rendering of Teeth with No Preprocessing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

State of the Art in Photon Density Estimation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Importance sampling the Rayleigh phase function
Publication: Research - peer-review › Journal article – Annual report year: 2011

Photon Differentials in Space and Time
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Development of an efficient GPU-accelerated model for fully nonlinear water waves
Publication: Research › Conference abstract for conference – Annual report year: 2010

Development of Desktop Computing Applications and Engineering Tools on GPUs
Publication: Research › Poster – Annual report year: 2010

Temporal Photon Differentials
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Empirical formula for the refractive index of freezing brine
Publication: Research - peer-review › Journal article – Annual report year: 2009

Temporal Glare: Real-Time Dynamic Simulation of the Scattering in the Human Eye
Publication: Research - peer-review › Conference article – Annual report year: 2009

Light, Matter, and Geometry: The Cornerstones of Appearance Modelling
Publication: Research › Ph.D. thesis – Annual report year: 2008

Application of Lorenz-Mie Theory In Graphics
Publication: Research › Conference abstract in proceedings – Annual report year: 2008

Light, Matter, and Geometry: The Cornerstones of Appearance Modelling
Publication: Research - peer-review › Book – Annual report year: 2008

Computing the scattering properties of participating media using Lorenz-Mie theory
Publication: Research - peer-review › Conference article – Annual report year: 2007

Better Faster Noise with the GPU
Publication: Research - peer-review › Poster – Annual report year: 2007

Computing the scattering properties of participating media using Lorenz-Mie theory
Publication: Research - peer-review › Computer programme – Annual report year: 2007

Fast High-Quality Noise
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

Geometric Operators on Boolean Functions
Publication: Research - peer-review › Report – Annual report year: 2007
Photon Differentials
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

The Aristotelian Rainbow: From Philosophy to Computer Graphics
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

Abductive Inference using Array-Based Logic
Publication: Research › Report – Annual report year: 2006

Efficient light scattering through thin semi-transparent objects
Publication: Research - peer-review › Article in proceedings – Annual report year: 2005

Knowledge exchange between agents in real-time environments
Publication: Research - peer-review › Article in proceedings – Annual report year: 2005

Lighting effects for mobile games
Publication: Research - peer-review › Article in proceedings – Annual report year: 2005

Scene independent real-time indirect illumination
Publication: Research - peer-review › Article in proceedings – Annual report year: 2005

Projects:

Leak detection in water supply pipes using drone-borne sensor technology
Project

Estimation of Surface Radiometry
Project: PhD

Image Synthesis and Analysis of Engineered Surface Microstructure
Project: PhD

Computer Vision for Flexible Automation
Project: PhD

Model-optimized Screening of Checked-in Luggage
Project: PhD

Material Appearance Prediction
Project: PhD

Hybrid Techniques for Interactive Photorealistic Rendering
Project: PhD

A statistical Take on Computer Graphics - Automatic Radiometric Modelling of Real World Objects
Project: PhD

Global Illumination - Anwendung af dynamiske lösningsrum i spil og animation
Project: PhD