

# HiGraphics 2019

Vortragsprogramm



**Montag, 18.03.19**

**19:00 Uhr - 20:15 Uhr**

Global Illumination

**Alisa Jung (KIT Karlsruhe)**

Selective guided sampling with complete light transport paths

**Pascal Grittmann (Uni Saarbrücken)**

Improving Multiple Importance Sampling

**Sebastian Herholz (Uni Tübingen)**

Volume Path Guiding based on Zero-Variance Random Walk Theory

**Krzysztof Wolski (MPII Saarbrücken)**

Dataset and metrics for predicting local visible differences

**Gilles Rainer (UCL London)**

Neural BTF Representation for Compression and Interpolation

**Kathrin Ballweg (TU Darmstadt)**

Visual Graph Comparison - Perception and Cognition Perspectives

**20:30 Uhr - 21:45 Uhr**

Perception

**Freitag, 15.03.19**

**19:00 Uhr - 20:15 Uhr**

Learning

**Leslie Wöhler (TU Braunschweig)**

Automatic Infant Face Verification via CNNs

**Noshaba Cheema (Uni Saarbrücken)**

Fine-Grained Semantic Segmentation of Motion Capture Data using Dilated Temporal Fully-Convolutional Neural Networks

**Moritz Heinemann (Uni Stuttgart)**

ML-based Visual Analysis of Droplet Behavior in Multiphase Flow Simulations

**20:30 Uhr - 21:45 Uhr**

Rendering and Simulation

**Jozef Hladky (MPII Saarbrücken)**

Shading for Streaming Rendering

**Maximilian Reischl (Uni Bayreuth)**

Physically Based Real-Time Rendering of Teeth and Partial Restorations

**Max Kaluschke (Uni Bremen)**

Computing Hard Contacts with heterogeneous Materials for Medical Simulators

**Samstag, 16.03.19**

**19:00 Uhr - 19:30 Uhr**

Wolfgang Strasser  
Memorial Lecture

**Philipp Slusallek (DFKI Saarbrücken)**

Understanding the World with AI: Training and  
Validating AI Systems Using Synthetic Data

**19:45 Uhr - 21:25 Uhr**

Computational  
Geometry

**Tim Krake (HdM Stuttgart)**

Dynamic Mode Decomposition

**Christoph Peters (KIT Karlsruhe)**

Moments in Graphics

**Daniel Zint (Uni Erlangen)**

Discrete Mesh Optimization on GPU

**Dennis Bubenberger (Uni Tübingen)**

Hierarchical Quad Meshing of 3D Scanned Surfaces /  
Hex-Meshing Project

Modeling

**Sonntag, 17.03.19**

**19:00 Uhr - 20:15 Uhr**

Tracking

**Bastian Wandt (Uni Hannover)**

Monocular Human Motion Capture

**Franziska Müller (MPII Saarbrücken)**

Real-time Shape and Pose Reconstruction of Two  
Interacting Hands

**Timo von Marcard (Uni Hannover)**

Accurate 3D Human Pose in The Wild Using IMUs  
and a Moving Camera

**20:30 Uhr - 21:45 Uhr**

Reconstruction and  
Detection

**Marc Kassubeck (TU Braunschweig)**

Data-driven Compressed Sensing Tomography

**Christoph Reinders (Uni Hannover)**

Learning Convolutional Neural Networks for Object  
Detection with very little Training Data

**Markus Wedekind (TU Braunschweig)**

Real-Time High-Resolution Cone-Beam CT using  
GPU-based Multi-Resolution Sampling