

## **Technical Briefs**

### **The Venetian Macao Meeting Room Sicily 2505, Level 1**

#### **Monday, 05 December 2016**

14:15 - 16:00

##### **System Design and Applications**

Session Chair: Chi-Wing Fu, Philip

- VPET - A Toolset for Collaborative Virtual Filmmaking
- "Rigging the Oceans of Disney's ""Moana"""
- System for Matching Paintings with Music based on Emotions

16:15 - 18:00

##### **Display and Scene Analysis**

Session Chair: Michael Goesele

- Stray-Light Compensation in Dynamic Projection Mapping
- Joint Depth Map Interpolation and Segmentation with Planar Surface Model
- A Low Cost Holographic Display
- Display tracking using blended images with unknown mixing ratio as a template
- Video Stitching for Handheld Inputs via Combined Video Stabilization

#### **Tuesday, 06 December 2016**

9:00 – 10:45

##### **Sketch-Based Interface and User Interaction**

Session Chair: YuShuen Wang

- A Multi-level Sketch-based Interface for Decorative Pattern Exploration
- Hand-Posture-Augmented Multitouch Interactions for Exploratory Visualization
- Model-driven Sketch Reconstruction with Structure-oriented Retrieval

16:15 - 18:00

##### **Geometry and Shape Analysis**

Session Chair: Sai-Kit Yeung

- Construction and Visualization of Branched Covering Spaces
- Rendering Kaleidoscopic Scenes Based on Orbifold Theory
- Tensor Field Design in Volumes
- Quantitative Analysis of Saliency Models
- Horizon Measures: A Novel View-Independent Shape Descriptor

### Wednesday, 07 December 2016

14:15 - 16:00

#### **Deformation and Simulation**

Session Chair: Andrea Tagliasacchi

- Anisotropic Surface Based Deformation
- Smoothly Deformable Spheres: Modeling, Deformation, and Interaction
- "Semantically-aware Blendshape Rigs from Facial Performance Measurements"
- A Combining Method of Fluid Animations by Interpolating Flow Fields
- Physics Based Boiling Bubble Simulation

### Thursday, 08 December 2016

9:00 – 10:45

#### **Rendering**

Session Chair: Yoshinori Dobashi

- Z2 Traversal Order for VR Stereo Rendering on Tile-based Mobile GPUs
- Efficient Surface Diffraction Renderings with Chebyshev Approximations
- Multi Bounding Volume Hierarchies for Ray Tracing Pipelines
- Neural Network Ambient Occlusion
- View-space Meta-ball Approximation by Depth-free Accumulative Fields

11:00 – 12:45

#### **Style Transfer and Learning**

Session Chair: Oliver van Kaick

- Lighting Transfer across Multiple Views through Local Color Transforms
- Automatic Generation of Large-scale Handwriting Fonts via Style Learning
- Deep Patch-wise Colorization Model for Grayscale Images
- Face Texture Synthesis from Multiple Images via Sparse and Dense Correspondence
- Blending Texture Features from Multiple Reference Images for Style Transfer