

FC Full Conference Pass	1D Full Conference One-Day Pass	BC Basic Conference Pass	EP Exhibits Plus
ET Electronic Theater Ticket	RT Reception Ticket	EO Exhibits Only	EX Exhibitor

Registration Categories At-A-Glance							
	FC	1D	BC	EP	EO	EX	ET RT
Art Gallery	FC	1D	BC	EP	EO	EX	ET RT
Computer Animation Festival - Animation Theater	FC	1D	BC	EX			
Computer Animation Festival - Electronic Theater	FC*	1D*	ET*				
Computer Animation Festival - Panel Sessions	FC	1D	BC				
Courses	FC	1D					
Emerging Technologies	FC	1D	BC	EP	EX		
Emerging Technologies Talk	FC	1D	BC	EP	EX		
Exhibitor Talk	FC	1D	BC	EP	EO	EX	
Featured Sessions	FC	1D	BC	EX			
Keynotes	FC	1D	BC	EX			
Posters	FC	1D	BC	EP	EO	EX	
Reception	FC*	RT*					
Symposium on Education	FC	1D	BC				
Symposium on Mobile Graphics & Interactive Applications	FC	1D	BC				
Symposium on Visualization	FC	1D	BC				
Technical Briefs	FC	1D					
Technical Papers - Fast Forward	FC	1D	BC	EP	EX		
Technical Papers	FC	1D					
Trade Exhibition	FC	1D	BC	EP	EO	EX	
Virtual Reality (VR) Showcase	FC	1D	BC	EP	EO	EX	
Workshops	FC	1D	BC				

*Access by tickets only.

CONFERENCE: 5 - 8 DECEMBER 2016

EXHIBITION: 6 - 8 DECEMBER 2016

THE VENETIAN MACAO, MACAO

08:00 – 17:30

The Venetian Macao Foyer, Level 3

Registration

09:00 – 18:00

The Venetian Macao, Booth A-01, Ballroom J, Level 3

Exhibition Management Office

09:00 – 18:00

The Venetian Macao, Capri 1001, Lower Ground

Conference Management Office

09:00 – 18:00

The Venetian Macao, Capri 1002, Lower Ground

Speaker Preparation Room

09:00 – 18:00

The Venetian Macao, Capri 1003, Lower Ground

Speaker Rehearsal Room

09:00 – 18:00

The Venetian Macao, Capri 1004, Lower Ground

Meeting Room

09:00 – 18:00

The Venetian Macao, Capri 1101, Lower Ground

Press Office

09:00 – 18:00

The Venetian Macao, Capri 1104, Lower Ground

Committee Room

09:00 – 18:00

The Venetian Macao, Capri 1105-1106 / 1005-1006, Lower Ground

Student Volunteer Office

Monday, 05 December 2016

09:00 – 18:00

The Venetian Macao, Naples 2605-2606 / 2705-2706, Level One
Computer Animation Festival – Animation Theater

09:00 – 12:45

The Venetian Macao, Sicily 2401-2402, Level One
Courses
Geometric Deep Learning

09:00 – 12:45

The Venetian Macao, Sicily 2405-2406, Level One
Courses
Modeling Behavior for Social Robots and Virtual Humans

09:00 – 18:00

The Venetian Macao, Sicily 2501-2502, Level One
Workshops
Virtual Reality meets Physical Reality: Modelling and Simulating Virtual Humans and Environments

09:00 – 12:45

The Venetian Macao, Sicily 2503-2504, Level One
Workshops
Crafting for Spirituality: A Pedagogic Project for Digital heritage: Digital Sculpting, Projection Mapping and Beyond

09:00 – 18:00

The Venetian Macao Foyer, Level 3
Posters

10:00 – 18:00

The Venetian Macao Foyer, Level 3
SIGGRAPH Asia Village

11:00 – 12:45

The Venetian Macao, Sicily 2403-2404, Level One
Courses
How to Write a SIGGRAPH Paper: A Guide to Choosing a Good Research Topic, Doing the Research, and Wr

14:15 – 18:00

The Venetian Macao, Naples 2701A-B, Level One

ACM Chapters Meeting

14:15 – 18:00

The Venetian Macao, Sicily 2401-2402, Level One

Courses

Data-Driven Shape Analysis and Processing

14:15 – 16:00

The Venetian Macao, Sicily 2403-2404, Level One

Courses

BRDF Representation and Acquisition

14:15 – 18:00

The Venetian Macao, Sicily 2503-2504, Level One

Workshops

Creating Virtual Environments with 3D Printing and Photogrammetry

18:00 – 20:00

The Venetian Macao, Ballroom H+I, Level 3

Technical Papers Fast Forward

Tuesday, 06 December 2016

09:00 – 18:00

The Venetian Macao, Naples 2605-2606 / 2705-2706, Level One
Computer Animation Festival – Animation Theater

09:00 – 22:45

The Venetian Macao, Sicily 2401-2402, Level One

Courses

Story for Programmers, Designers, and Artists in Animation, VFX, and Games

09:00 – 10:45

The Venetian Macao, Sicily 2403-2404, Level One

Courses

Computational Diffractive Sensing and Imaging: Using Optics for Computation & Computation for Optics

09:00 – 10:45

The Venetian Macao, Sicily 2501-2502, Level One

Technical Papers

Video

- 360 Video Stabilization
- Temporally Coherent Completion of Dynamic Video
- Robust Background Identification for Dynamic Video Editing
- Virtual Reality Video

09:00 – 10:45

The Venetian Macao, Sicily 2503-2504, Level One

Technical Papers

Indoor Scene Modeling

- Structure-oriented Networks of Shape Collections
- Dynamic Furniture Modeling Through Assembly Instructions
- Mess It Up: Action-Driven 3D Indoor Scene Evolution
- Reconstructing and Refurnishing Indoor Spaces

09:00 – 18:00

The Venetian Macao Foyer, Level 3

Posters

10:00 – 18:00

The Venetian Macao, Ballroom G+J+K+L, Level 3

Emerging Technologies

10:00 – 18:00**The Venetian Macao, Ballroom G+J+K+L, Level 3**
Emerging Technologies Talk**10:00 – 18:00****The Venetian Macao, Ballroom G+J+K+L, Level 3**
Trade Exhibition**10:00 – 18:00****The Venetian Macao, Ballroom G+J+K+L, Level 3**
VR Showcase**10:00 – 18:00****The Venetian Macao Foyer, Level 3**
SIGGRAPH Asia Village**11:00 – 12:45****The Venetian Macao, Ballroom H+I, Level 3**
Keynote by Paul Debevec

Achieving Photoreal Virtual Humans in Movies, Games, and Virtual Reality

13:00 – 14:00**The Venetian Macao Foyer, Level 3**
Posters Presentation**14:15 – 18:00****The Venetian Macao, Sicily 2401-2402, Level One**
Courses

Directions in Shape Analysis towards Functionality

14:15 – 18:00**The Venetian Macao, Sicily 2403-2404, Level One**
Courses

Computing and Processing Correspondences with Functional Maps

14:15 – 16:00**The Venetian Macao, Sicily 2405-2406, Level One**
Courses

Rotational Symmetries on Surfaces: Theory, Algorithms, and Applications

14:15 - 16:00**The Venetian Macao, Sicily 2501-2502, Level One**

Technical Papers**Computational Photography**

- Computational Bounce Flash for Indoor Portraits
- Deep Joint Demosaicking and Denoising
- Burst photography for high dynamic range and low-light imaging on mobile cameras
- Learning-Based View Synthesis for Light Field Cameras
- Birefractive Stereo: Single-Shot Depth Imaging using a Birefringent Material

14:15 – 16:00**The Venetian Macao, Sicily 2503-2504, Level One****Technical Papers****Shape Semantics**

- Relationship Templates for Synthesizing Scenes with Complex Relations
- Shape2Vec: semantic-based descriptors for 3D shapes, sketches and images
- Functionality Preserving Shape Style Transfer
- A Scalable Active Framework for Region Annotation in 3D Shape Collections
- Example-Based Sketch Segmentation and Labeling using

14:15 – 16:00**The Venetian Macao, Sicily 2505-2506, Level One****Technical Papers****High Resolution**

- Efficient GPU Path Rendering Using Scanline Rasterization
- Pyramid of Arclength Descriptor for Generating Collage of Shapes
- GST: GPU-Decodable Supercompressed Textures
- Scalable Inside-Out Image-Based Rendering

16:15 – 18:00**The Venetian Macao, Sicily 2501-2502, Level One****Technical Papers****Scanning & Tracking People**

- High-Quality Reconstruction of Lips from Monocular Video
- Model-Based Teeth Reconstruction
- High-Fidelity Facial and Speech Animation for VR HMDs
- Convolution Models for Real-Time Hand Modeling and Tracking

16:15 – 18:00**The Venetian Macao, Sicily 2503-2504, Level One****Technical Papers****Sound & Pattern Synthesis**

- Interactive Sound Propagation with Bidirectional Path Tracing
- Crumpling Sound Synthesis
- gTangle: a Grammar for the Procedural Generation of Tangle Patterns
- Representing and Scheduling Procedural Generation using Operator Graphs
- Printone: Interactive Resonance Simulation for Free-form Print-wind Instrument Design

17:00 – 19:00

The Venetian Macao, Ballroom H+I, Level 3

Computer Animation Festival – Electronic Theater

19:00 – 21:00

SIGGRAPH Asia 2016 Reception

Wednesday, 07 December 2016

09:00 – 18:00

The Venetian Macao, Naples 2605-2606 / 2705-2706, Level One
Computer Animation Festival – Animation Theater

09:00 – 10:45

The Venetian Macao, Naples 2603, Level One
Symposium on Visualization: Invited Speaker (Eduard Gröller)
Visual Computing and Analysis of Complex Systems

09:00 – 10:45

The Venetian Macao, Sicily 2401-2402, Level One
Courses
Cage-Based Performance Capture

09:00 – 10:45

The Venetian Macao, Sicily 2403-2404, Level One
Courses
Modern Techniques and Applications for Real-Time Non-Rigid Registration

09:00 – 10:45

The Venetian Macao, Sicily 2501-2502, Level One
Technical Papers
All About Sampling

- Robust Light Transport Simulation via Metropolized Bidirectional Estimators
- Temporal Gradient-Domain Path Tracing
- Anti-Aliased Low Discrepancy Sampling
- Stair Blue Noise Sampling
- Texture Space Caching and Reconstruction for Ray Tracing

09:00 – 10:45

The Venetian Macao, Sicily 2503-2504, Level One
Technical Papers
Parameterization and Remeshing

- Bounded Distortion Parametrization in the Space of Metrics
- Computing Inversion-Free Mappings by Simplex Assembly
- Hyperbolic Orbifold Tutte Embeddings
- Interactively Controlled Quad Remeshing of High Resolution 3D Models

09:00 – 10:45

The Venetian Macao, Sicily 2505-2506, Level One

Technical Papers

Fantastic Elastics

- High-Resolution Interaction with Corotational Coarsening Models
- Descent Methods for Elastic Body Simulation on the GPU
- Reconstructing Personalized Anatomical Models for Physics-based Body Animation
- Vivace: a Practical Gauss-Seidel Method for Stable Soft Body Dynamics

09:00 – 18:00

The Venetian Macao Foyer, Level 3

Posters

10:00 – 18:00

The Venetian Macao, Ballroom G+J+K+L, Level 3

Emerging Technologies

10:00 – 18:00

The Venetian Macao, Ballroom G+J+K+L, Level 3

Emerging Technologies Talk

10:00 – 18:00

The Venetian Macao, Ballroom G+J+K+L, Level 3

Trade Exhibition

10:00 – 18:00

The Venetian Macao, Ballroom G+J+K+L, Level 3

VR Showcase

10:00 – 18:00

The Venetian Macao Foyer, Level 3

SIGGRAPH Asia Village

11:00 – 12:45

The Venetian Macao, Ballroom H+I, Level 3

Keynote by Brian Cabral

VR Capture: Designing and Building an Open Source 3D-360 Video Camera

11:00 – 12:45

The Venetian Macao, Sicily 2401-2402, Level One

Courses

Discrete Computational Mechanics for Stiff Phenomena

13:00 – 15:00

The Venetian Macao, Ballroom H+I, Level 3
Computer Animation Festival – Electronic Theater

13:00 – 14:00

The Venetian Macao Foyer, Level 3
Posters Presentation

14:15 – 18:00

The Venetian Macao, Sicily 2403-2404, Level One
Courses
Directional Field Synthesis, Design, and Processing

14:15 – 18:00

The Venetian Macao, Sicily 2405-2406, Level One
Courses
OpenVX: a Framework for Accelerating Computer Vision

14:15 – 16:00

The Venetian Macao, Sicily 2501-2502, Level One
Technical Papers

Fabrication

- FlexMolds: Automatic Design of Flexible Shells for Molding
- Sustainable Fabrication of 3D Frame Shapes
- Fabrication of freeform objects by principal strips
- Stochastic Structural Analysis for Context-Aware Design and Fabrication
- Computational Multicopter Design

14:15 – 16:00

The Venetian Macao, Sicily 2503-2504, Level One
Technical Papers

Meshes & Fields

- Mesh Denoising via Cascaded Normal Regression
- Practical 3D Frame Field Generation
- Interchangeable Seamless Components from 3D Models
- Fast and Reliable Example-Based Mesh IK for Stylized Deformations

16:15 – 18:00

The Venetian Macao, Ballroom H+I, Level 3
Featured Panel Session

He's Back! T2 25 years later.

16:15 – 18:00

The Venetian Macao, Sicily 2501-2502, Level One

Technical Papers

Materials

- Simultaneous Acquisition of Microscale Reflectance and Normals
- An intuitive control space for material appearance
- Recovering Shape and Spatially-Varying Surface Reflectance under Unknown Natural Illumination
- Minimal BRDF Sampling for Two-Shot Near-Field Reflectance Acquisition
- Sparse-as-Possible SVBRDF Acquisition

16:15 – 18:00

The Venetian Macao, Sicily 2503-2504, Level One

Technical Papers

Tessellations

- Power Coordinates: A Geometric Construction of Barycentric Coordinates on Convex Polytopes
- Optimal Voronoi Tessellations through Convex Function Approximation
- Manifold Differential Evolution (MDE): A Global Optimization Method for Geodesic Centroidal Voronoi Tessellations on Meshes
- Centroidal Power Diagrams with Capacity Constraints -- Computation, Applications and Extension

16:15 – 18:00

The Venetian Macao, Sicily 2505-2506, Level One

Technical Papers

Smash & Splash

- SMASH: Data-driven Authoring of Physically Valid Collisions
- Eulerian Solid-Fluid Coupling
- A scalable Schur-complement fluids solver for heterogeneous compute platforms
- Dispersion Kernels for Water Wave Simulation

18:15 – 20:15

The Venetian Macao, Ballroom H+I, Level 3

Computer Animation Festival – Electronic Theater

Thursday, 08 December 2016

09:00 – 18:00

The Venetian Macao, Naples 2605-2606 / 2705-2706, Level One
Computer Animation Festival – Animation Theater

09:00 – 10:45

The Venetian Macao, Naples 2603, Level One
Symposium on Visualization: Invited Speaker (Xiaoru Yuan)
<TITLE TBC>

09:00 – 12:45

The Venetian Macao, Sicily 2401-2402, Level One
Courses
Sketch-Based Modeling

09:00 – 12:45

The Venetian Macao, Sicily 2403-2404, Level One
Courses
Possibilities and Challenges with Eye Tracking in Video Games and Virtual Reality Applications

09:00 – 10:45

The Venetian Macao, Sicily 2405-2406, Level One
Courses
Sorting in Space: Multidimensional Data Structures for Computer Graphics and Vision Applications

09:00 – 10:45

The Venetian Macao, Sicily 2501-2502, Level One
Technical Papers
Filtering Images
- Bilateral Guided Upsampling
- Parallel Recursive Filtering of Infinite Input Extensions
- Rapid, Detail-Preserving Image Downscaling
- VizGen: Accelerating Visual Computing Prototypes in Dynamic Languages

09:00 – 10:45

The Venetian Macao, Sicily 2503-2504, Level One
Technical Papers
Human Motion
- Authoring Directed Gaze for Full-Body Motion Capture
- EgoCap: Egocentric Marker-less Motion Capture with Two Fisheye Cameras
- Data-driven Inverse Dynamics for Human Motion
- WarpDriver: Context-Aware Probabilistic Motion Prediction for Crowd Simulation
- Gesture3D: Posing 3D Characters via Gesture Drawings

09:00 – 18:00**The Venetian Macao Foyer, Level 3****Posters****10:00 – 16:00****The Venetian Macao, Ballroom G+J+K+L, Level 3****Emerging Technologies****10:00 – 16:00****The Venetian Macao, Ballroom G+J+K+L, Level 3****Emerging Technologies Talk****10:00 – 16:00****The Venetian Macao, Ballroom G+J+K+L, Level 3****Trade Exhibition****10:00 – 16:00****The Venetian Macao, Ballroom G+J+K+L, Level 3****VR Showcase****10:00 – 16:00****The Venetian Macao Foyer, Level 3****SIGGRAPH Asia Village****11:00 – 12:45****The Venetian Macao, Ballroom H+I, Level 3****Featured Panel Session**

The Future of Imaging

11:00 – 12:45**The Venetian Macao, Sicily 2501-2502, Level One****Technical Papers****Complex Rendering**

- Downsampling Scattering Parameters for Rendering Anisotropic Media
- Adaptive Matrix Column Sampling and Completion for Rendering Participating Media
- Efficient Rendering of Heterogeneous Poly-Disperse Granular Media
- Image-based Control Variates for Rendering
- Simulating the structure and appearance of solid wood

11:00 – 12:45**The Venetian Macao, Sicily 2503-2504, Level One****Technical Papers****Data Driven Modeling**

- Interactive Mechanism Modeling from Multi-view Images
- Block Assembly for Global Registration of Building Scans
- 3D Attention-Driven Depth Acquisition for Online Scene Modeling
- Automated View and Path Planning for Scalable Multi-Object 3D Scanning
- Directing User Attention via Visual Flow on Web Designs

14:15 – 18:00**The Venetian Macao, Sicily 2401-2402, Level One****Courses**

Hands-On: Rapid Interactive Application Prototyping for Media Arts and Stage Production

14:15 – 16:00**The Venetian Macao, Sicily 2501-2502, Level One****Technical Papers****All About Seeing (Closing Session)**

- Health-Aware Display: Blocking Harmful Blue Light while Preserving Image Color Appearance
- Motion Parallax in Stereo 3D: Model and Applications
- Unsupervised Texture Transfer from Images to Model Collections
- Regional Foremost Matching for Internet Images
- Towards Foveated Rendering for Gaze-Tracked Virtual Reality

16:00 – 18:00**The Venetian Macao, Ballroom H+I, Level 3****Computer Animation Festival – Electronic Theater**