



SIGGRAPH
ASIA2012

The 5th ACM SIGGRAPH Conference and Exhibition on
Computer Graphics and Interactive Techniques in Asia

Embracing
the
digital
convergence

CONFERENCE LOCATOR

CONFERENCE 28 Nov - 1 Dec
EXHIBITION 29 Nov - 1 Dec
Singapore EXPO

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Program/Event Name	Hashtags
Art Gallery	#SIGGRAPHAsia #artgallery
Computer Animation Festival	#SIGGRAPHAsia #caf
Courses	#SIGGRAPHAsia #courses
Emerging Technologies	#SIGGRAPHAsia #etech
Exhibition	#SIGGRAPHAsia #exhibits
Exhibitor Talks & Sessions	#SIGGRAPHAsia #talks #sessions
Featured Speakers	#SIGGRAPHAsia #speakers
Posters	#SIGGRAPHAsia #posters
Special Sessions	#SIGGRAPHAsia #specialsessions
Student Volunteers	#SIGGRAPHAsia #sv
Symposium on Apps	#SIGGRAPHAsia #symposium
Technical Briefs	#SIGGRAPHAsia #techbriefs
Technical Papers	#SIGGRAPHAsia #techpapers

Don't want to miss presentations or want to know where exhibitors are holding their sessions?

Browse through daily schedules or event maps and save them to your favorites.

Download the free SIGGRAPH Asia 2012 app.



Hold the camera on your iPhone or Android smartphone
(with free-to-download QR code reader)
over this code to download the app.

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Daily Schedules

- 12 Wednesday, 28 November
- 14 Thursday, 29 November
- 26 Friday, 30 November
- 42 Saturday, 1 December

52 Hotel List

54 MAX Atria Floorplan

Conference and Exhibition Hours & Policies

Registration: Foyer 1, Level 1

Tuesday, 27 November 2012	14:00-18:00
Wednesday, 28 November 2012	08:00-18:30
Thursday, 29 November 2012	08:00-18:30
Friday, 30 November 2012	08:00-18:30
Saturday, 1 December 2012	08:00-18:00

Merchandise and Publications: MAX Atria, Level 2

Wednesday, 28 November 2012	08:00-18:30
Thursday, 29 November 2012	08:00-18:30
Friday, 30 November 2012	08:00-18:30
Saturday, 1 December 2012	08:00-18:00

Art Gallery and Emerging Technologies, MAX Atria Foyer, Level 1

Thursday, 29 November 2012	10:00-18:00
Friday, 30 November 2012	10:00-18:00
Saturday, 1 December 2012	10:00-17:00

Conference: MAX Atria, Level 2

Wednesday, 28 November 2012	09:00-18:00
Thursday, 29 November 2012	09:00-18:00
Friday, 30 November 2012	09:00-18:00
Saturday, 1 December 2012	09:00-18:00

Bookstore: MAX Atria, Level 2

Wednesday, 28 November 2012	09:30-18:30
Thursday, 29 November 2012	09:30-18:30
Friday, 30 November 2012	09:30-18:30
Saturday, 1 December 2012	09:30-18:30

Speaker Preparation Room: Opal 102, Level 1

Tuesday, 27 November 2012	14:00-19:00
Wednesday, 28 November 2012	08:00-19:00
Thursday, 29 November 2012	08:00-19:00
Friday, 30 November 2012	08:00-19:00
Saturday, 1 December 2012	08:00-16:00

Conference Management Office: Opal 101, Level 1

Wednesday, 28 November 2012	08:00-19:00
Thursday, 29 November 2012	08:00-19:00
Friday, 30 November 2012	08:00-19:00
Saturday, 1 December 2012	08:00-19:00

Exhibition Management Office: Exhibition Hall 2B, Level 1

Wednesday, 28 November 2012	08:00-19:00
Thursday, 29 November 2012	08:00-19:00
Friday, 30 November 2012	08:00-19:00
Saturday, 1 December 2012	08:00-19:00

Exhibition: Exhibition Hall 2B, Level 1

Thursday, 29 November 2012	10:00-18:00
Friday, 30 November 2012	10:00-18:00
Saturday, 1 December 2012	10:00-17:00

Conference Policies

- Children under 16 are not permitted in the Exhibition. Age verification is required.
- Registered conference attendees under the age of 16 must be accompanied by an adult at all times.
- SIGGRAPH Asia 2012 reserves the right to deny registration or entrance to any attendee or prospective attendee, and to cancel an existing registration, if it determines that a registration or an attendee is not in the best interest of SIGGRAPH Asia 2012 or ACM SIGGRAPH.
- Lost badges cannot be replaced. If you lose your badge, you must register again at the published rates to obtain a new badge.
- SIGGRAPH Asia 2012 conference documentation and pre-purchased merchandise will not be shipped, nor will refunds be given for any material not picked up.

Camera/Recording Policies

No cameras or recording devices are permitted at SIGGRAPH Asia 2012. Abuse of this policy will result in revocation of the individual's registration credentials.

SIGGRAPH Asia 2012 employs a professional photographer and reserves the right to use all images that this photographer takes during the conference and exhibition for publication and promotion of future ACM SIGGRAPH events.

General Information

ACM Transactions on Graphics

The printed ACM Transactions on Graphics (Conference Proceedings Special Issue) contains the Technical Papers. ACM Transactions on Graphics (Conference Proceedings Special Issue) was available for purchase online through the SIGGRAPH Asia 2012 registration system on or before 15 October. There will be no sales of onsite copies. ACM Transactions on Graphics can be purchased through ACM's e-store at <http://store.acm.org> post-conference.

Accessibility

Located next to Changi Airport and well-connected by major highways, Singapore EXPO Convention and Exhibition Centre is also accessible by train via a dedicated MRT station.

By Taxi:

There are numerous taxis available in Singapore that offer reliable service. To book a taxi, you may call any of the major taxi companies here in Singapore:

- Comfort and City Cab: +65 6552 1111
- Maxi Cab: +65 6535 3534
- Premier Taxis: +65 6476 8880
- SMRT Taxis: +65 6555 8888

There is an additional surcharge of S\$2 for all taxis departing from the Singapore EXPO.

By Train – Mass Rapid Transit (MRT) Line:

Singapore EXPO is served by its own station, Expo MRT station. To get to Singapore EXPO from Changi Airport, take the east bound train. It is just one stop from Changi Airport MRT and the journey lasts only four minutes.

If you are coming from other parts of Singapore, transfer trains at Tanah Merah station (on the East West line) where the train will take you to Expo MRT in three minutes.

Bookstore

MAX Atria, Level 2

BreakPoint Books offers the latest and greatest books, CDs, and DVDs on computer animation, graphic design, gaming, 3D graphics, modeling, and digital artistry. The bookstore features recent books by SIGGRAPH speakers and award winners.

Note: Bookstore refunds will only be processed during the conference. All bookstore policies are those of BreakPoint Books and not SIGGRAPH Asia 2012.

Business Centre

Conveniently located at Foyer 1, Level 1, the Expo Business Centre opens during weekdays from 09:00 to 18:00 and Saturdays from 09:00 to 13:00.

IT and telecommunication solutions include analogue, ISDN, international and local lease lines, high-speed internet access, secretarial services including printing, faxing, photocopying, etc. Baggage storage is available for hand carried bags and suitcases.

Contacts at Expo Business Centre:

Email: expobizctr@starhub.com

Hotline: 1800 822 3333

Fax: +65 6822 6002

Cafeteria/Restaurants

A variety of restaurants and bars under the heading Flavours East are available within Singapore EXPO. Exotic cuisines ranging from North Indian and Thai to traditional Chinese dining and fast food are all available within the convention and exhibition centre.

Child Care

Child care will not be provided at SIGGRAPH Asia 2012. Contact your hotel concierge for suggestions.

Conference Management Office Opal 101, Level 1

If you have questions regarding SIGGRAPH Asia 2012, stop by this office anytime during conference hours.

Exhibition Management Office Exhibition Hall 2B, Level 1

Exhibition management representatives are available during exhibition opening hours to meet with exhibitors and help with plans for exhibiting at SIGGRAPH Asia 2013.

Lost and Found Conference Management Office, Opal 101, Level 1

To inquire about lost items during the conference, please proceed to the Conference Management Office. All lost items (including badges) should be turned into this location where they will be logged and stored until the conclusion of the conference. After the conference, all lost and found items will be turned over to the Security office of Singapore EXPO Convention and Exhibition Centre. Alternatively, Singapore EXPO's concierge team is available at MAX Atria, Level 1.

Merchandise and Publications

Conference documentation included with your registration must be picked up at the Registration Counter. Pre-purchased conference documentation and merchandise will not be shipped, nor will refunds be given for any material that is not picked up. The Full Conference DVD and other merchandise from SIGGRAPH Asia 2012 and previous conference editions are also available at the Merchandise and Publications Store on Level 2 of MAX Atria.

animation

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Parking

Singapore EXPO car park charges for cars and light good vehicles:

- S\$2.80 for the first two hours
- Subsequent ½ hour at S\$1.30
- The maximum charge is limited to S\$16.50 a day.

Parking is free for motorcycles at Singapore EXPO.

Speaker Preparation Room Opal 102, Level 1

Please pick up your badge, registration credentials, and conference information at the registration counter before proceeding to the Speaker Preparation Room. You can collect your Speaker Ribbons and prepare your presentations at the Speaker Preparation Room.

Wireless Internet Access

Complimentary WiFi is available only within MAX Atria. Free internet connection is not available inside the exhibition hall. Singapore EXPO provides 802.11a/b/g wireless network access within the MAX Atria. To use the wireless network, attendees will need to have their own wireless (802.11a/b/g compatible) equipment.

Scan and select the “wireless@ maxatria” network.

Enter the password to login (password will be provided upon registration).

If exhibitors or attendees require internet access outside of the MAX Atria vicinity, ISDN and high-speed internet access are available (fees apply) at the Expo Business Centre located at Foyer 1, Level 1.



and any
tablet,
Laptop

* Supported Devices:

Engage the Speakers! Pigeonhole Live lets you post questions to speakers and vote for questions that others have asked on your mobile web device. With this, speakers can better identify and address your concerns. Now, everyone gets to take part in Q&A sessions without running to the microphones. Yes, even if you are a little shy.

1. Go to **<http://phlive.at>** on your web device*.
2. Enter passcode

SIGGRAPHASIA

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Wednesday, 28 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

08:00 – 18:30

Registration

Foyer 1, Level 1

**SIGGRAPH Asia Merchandise
and Publications**

MAX Atria, Level 2

09:00 – 10:45

- **Courses** **Topaz 220**
Method of Induction of Basic
and Complex Emotions in Video
Games and Virtual Environments

09:00 – 12:45

- **Courses** **Topaz 221**
Basic Concepts of Physically-Based
Rendering
- **Courses** **Peridot 201**
Modern Approaches to Media
Retargeting

11:00 – 12:45

- **Courses** **Topaz 220**
Projective Geometry and Duality
for Graphics, Games and
Visualization

Wednesday, 28 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

13:15 – 17:00

- **Courses** **Peridot 201**
Taming Render Times at Pixar:
CPU & GPU, Brave and Beyond

17:15 – 18:30

- **Courses** **Peridot 201**
How to Write a SIGGRAPH
Paper: A Guide to Choosing a
Good Research Topic, Doing the
Research, and Writing it Up

18:45 – 20:00

- ▲ Technical Papers Fast Forward **Garnet 217**
-

Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

08:00 – 18:30

Registration

Foyer 1, Level 1

**SIGGRAPH Asia Merchandise
and Publications**

MAX Atria, Level 2

09:00 – 18:00

■ ▲ **Posters Exhibition**

MAX Atria, Level 2

09:00 – 10:45

■ **Courses**
GPU Computing for Graphics

Topaz 221

■ **Courses**
Quaternion Applications

Topaz 220

■ **Technical Briefs**
Animation

- Visual Simulation of Freezing Ice with Air Bubbles
- Automatic Shape Morphing for Chinese Characters
- Latent Irregular Splines for Animation Approximation
- Region Matching with Proxy Ellipses for Coloring Hand-Drawn Animations
- Adaptive Dynamics with Hybrid Response

Garnet 219



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Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- **Technical Papers** **Peridot 206**
Physical Models
 - Motion-Guided Mechanical Toy Modeling
 - Recursive Interlocking Puzzles
 - Chopper: Partitioning Models into 3D-Printable Parts
 - 3D-Printing of Non-Assembly, Articulated Models

-
- **Technical Papers** **Peridot 201**
Operating on Images
 - Quality Prediction for Image Completion
 - Manifold Preserving Edit Propagation
 - Sparse PDF Maps for Non-Linear Multi-Resolution Image Operations
 - DressUP! Outfit Synthesis Through Automatic Optimization

09:00 – 12:45

- ▲ **Animation Theater** **Concourse**

10:00 – 18:00

- ▲ E **Exhibition** **Exhibition Hall 2B, Level 1**

Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

■ ▲ **Art Gallery** **MAX Atria Foyer,
Level 1**

■ ▲ **Emerging Technologies** **MAX Atria Foyer,
Level 1**

10:00 – 10:45

■ ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
OpenSubdiv: Open Source GPU
Rendering of Subdivision Surfaces

11:00 – 11:45

■ ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
OpenGL 4.3 and Beyond

11:00 – 12:00

■ ▲ E **Exhibitor Session** **Conference Hall
G – J**
Pixar Animation Studios
RenderMan 2012 – A Brave New
World: An Overview of Pixar's
Latest Rendering Technology

Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

11:00 – 12:45

- **Featured Speakers** **Garnet 217**
How Research is Changing Our Lives: MP3 and More
Karlheinz Brandenburg,
Fraunhofer Institute for Digital Media Technology IDMT

- ▲ **Birds of a Feather** **Topaz 220**
Pipeline & Tools

12:00 – 12:45

- ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
Current Trends in Advanced GPU Rendering

13:00 – 13:45

- ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
Accelerating Mobile Augmented Reality

13:00 – 14:00

- ▲ **Computer Animation Festival - Production Session** **Concourse**
The Visual Effects of The Avengers

Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

■ ▲ **Poster Presentation** **Max Atria, Level 2**

14:00 – 14:45

■ ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
Simplifying the Motion Graphics
Workflow – GPU-Accelerated 3D
Ray-Tracing in Adobe After Effects

14:00 – 16:00

■ ▲ E **Exhibitor Talk** **Hall 2B, Level 1**
SCAD Hong Kong **Exhibitor Talk**
SCAD & Partnerships – Introducing **Stage**
Elements of Art & Design &
Innovation into Businesses

14:15 – 16:00

■ ▲ **Special Sessions** **Garnet 217**
Prometheus: A VFX Journey to an
Alien Planet

Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

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- **Technical Briefs** **Garnet 219**
Imaging and Video
 - Edge-Preserving Image Decomposition using L1 Fidelity with L0 Gradient
 - Video Enhanced Gigapixel Panoramas
 - Gradient Domain Saliency-preserving Color-to-gray Conversion
 - Optimized Anaglyph Colorization
 - GPU-based Local-dimming for Power-efficient Imaging

-
- **Technical Papers** **Peridot 206**
Acquiring and Synthesizing Indoor Scenes
 - Example-based Synthesis of 3D Object Arrangements
 - An Interactive Approach to Semantic Modeling of Indoor Scenes with an RGBD Camera
 - A Search-Classify Approach for Cluttered Indoor Scene Understanding
 - Acquiring 3D Indoor Environments with Variability and Repetition
-

Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- **Technical Papers** **Peridot 201**
Comics, Texture and Scribbles
 - Structure Extraction from Texture via Relative Total Variation
 - Digital Reconstruction of Halftoned Color Comics
 - Automatic Stylistic Manga Layout
 - Lazy Selection: A Scribble-based Tool for Smart Shape Elements Selection

14:15 – 18:00

- **Courses** **Garnet 212**
Advances in New Interfaces for Musical Expressions
 - **Courses** **Topaz 220**
Previsualisation: Assisting Filmmakers in Realizing their Vision
 - ▲ **Animation Theater** **Concourse**
-

Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

15:00 – 15:45

- ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
Scaling OpenGL Applications
Across Multiple GPU's

15:00 – 16:00

- ▲ E **Exhibitor Session** **Conference Hall G – J**
Pixar Animation Studios
RenderMan 2012 – A Brave New
World: An Overview of Pixar's
Latest Rendering Technology

16:00 – 16:45

- ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
Mixing Graphics and Compute

16:00 – 18:00

- ▲ E **Exhibitor Talk** **Hall 2B, Level 1
Exhibitor Talk
Stage**
EON Reality
Interactive 3D Virtual and
Augmented Reality

Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

16:15 – 18:00

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|---|---|------------------|
| ■ | Courses | Topaz 221 |
| | Advanced OpenGL for DirectX Programmers | |
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| ■ | Technical Briefs | Garnet 219 |
| | Virtual Environment & Interaction | |
| | - MRsionCase: A Glasses-free Mixed Reality Showcase for Surrounding Multiple Viewers | |
| | - Robust 2D-3D Matching for 3D Object Pose Detection | |
| | - Efficient Rasterization for Edge-Based 3D Object Tracking on Mobile Devices | |
| | - Depth-based Real Time Head Pose Tracking Using 3D Template Matching | |
| | - Haptic Editor: Creation and Editing System for Touchable 3D Content | |
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Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

16:15 – 18:15

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| ■ | Technical Papers | Peridot 206 |
| | Materials and Images | |
| | - Material Memex: Automatic Material Suggestions for 3D Objects | |
| | - Interactive Bi-scale Editing of Highly Glossy Materials | |
| | - An Inverse Problem Approach for Automatically Adjusting the Parameters for Rendering Clouds Using Photographs | |
| | - Lighting Hair From The Inside: A Thermal Approach To Hair Reconstruction | |
| | - New Measurements Reveal Weaknesses of Image Quality Metrics in Evaluating Graphics Artifacts | |
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Thursday, 29 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

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- **Technical Papers** **Peridot 201**
Dynamics
 - Large-Scale Fluid Simulation using Velocity-Vorticity Domain Decomposition
 - Staggered Meshless Solid-Fluid Coupling
 - Automated Constraint Placement to Maintain Pile Shape
 - Speculative Parallel Asynchronous Contact Mechanics
 - Adaptive Anisotropic Remeshing for Cloth Simulation

19:00 – 21:00

- **Electronic Theater** **Garnet 217**

19:00 – 22:30

- **SIGGRAPH Asia 2012 Networking Reception (Ticketed Access)** **MAX Atria Foyer, Level 1**
-

Friday, 30 November

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- ▲ Basic Conference
- E Exhibits Only

08:00 – 18:30

Registration

Foyer 1, Level 1

**SIGGRAPH Asia Merchandise
and Publications**

MAX Atria, Level 2

09:00 – 18:00

■ ▲ **Posters Exhibition**

MAX Atria, Level 2

■ ▲ **Animation Theater**

Concourse

09:00 – 10:45

■ **Courses**
Fitness for Use: Introduction
to Professional Standards in
Modeling

Topaz 221

■ **Courses**
Story Structure for Programmers,
Game Designers and Artists

Topaz 220

 **CGSOCIETY**
SOCIETY OF DIGITAL ARTISTS



www.cgsociety.org

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

■ **Technical Briefs** **Garnet 219**

Rendering

- Realtime Animation and Rendering of Ocean Whitecaps
- A Time Series 3D Hierarchy for Real-Time Dynamic Point Cloud Interaction
- Real or Fake? Human Judgments About Photographs and Computer-generated Images of Faces
- A 2.5D Culling for Forward+
- Stroke-based Real-time Ink Wash Painting Style Rendering for 3D Models

■ **Technical Papers** **Peridot 206**

Full-Body Character Animation

- Generative Statistical Models for Semantic Motion Analysis and Synthesis
 - Terrain Runner: Control, Parameterization, Composition, and Planning for Highly Dynamic Motions
 - Falling and Landing Motion Control for Character Animation
 - Synthesis of Concurrent Object Manipulation Tasks
-

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

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- **Technical Papers** **Peridot 201**
Sculpting, Stacking, Structure and Boxes
 - Sculpting by Numbers
 - Stackabilization
 - Structural Optimization of 3D Masonry Buildings
 - Fast oriented bounding box optimization on the rotation group $SO(3, \mathbb{R})$

-
- ▲ **Education Panel** **Garnet 212**
Building Partnerships Between Industry and Academic Institutions

10:00 – 10:45

- ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
Simplifying the Motion Graphics Workflow – GPU-Accelerated 3D Raytracing in Adobe After Effects

10:00 – 18:00

- ▲ E **Exhibition** **Exhibition Hall 2B, Level 1**

-
- ▲ **Art Gallery** **MAX Atria Foyer, Level 1**
-

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

■ ▲ **Emerging Technologies** **MAX Atria Foyer,
Level 1**

11:00 – 11:45

■ ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
Developing an Optimized Maya
Plugin Using CUDA and OpenGL

11:00 – 12:00

■ ▲ E **Exhibitor Session** **Conference Hall
G – J**
Pixar Animation Studios
RenderMan 2012 - A Brave New
World: An Overview of Pixar's
Latest Rendering Technology

■ ▲ E **Recruitment Talk** **Hall 2B, Level 1
Exhibitor Talk
Stage**
PIXOMONDO Global Talent
Worldwide

11:00 – 12:45

■ ▲ **Birds of a Feather** **Topaz 220**
Blender Foundation - Artist
Showcase

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

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- ▲ **Emerging Technologies Talks** **Garnet 219**
- Cryptone: Interaction between Performers and Audiences With Inaudible DTMF Sounds
 - Flying Head: Head-synchronized Robot Control for Flying Telepresence
 - RoboJockey: Robotic Dance Entertainment for All
 - CursorCamouflage: Multiple Dummy Cursors as A Defense against Shoulder Surfing

11:00 – 13:00

- **Technical Papers** **Peridot 206**
- GPU's and Rendering
- Depth-Presorted Triangle Lists
 - Softshell: Dynamic Scheduling on GPUs
 - High-Quality Curve Rendering using Line Sampled Visibility
 - Axis-Aligned Filtering for Interactive Sampled Soft Shadows
 - Foveated 3D Graphics
-

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- **Technical Papers** **Peridot 201**
Shape Sets and Trees
 - Active Co-Analysis of a Set of Shapes
 - Co-Abstraction of Shape Collections
 - An Optimization Approach for Extracting and Encoding Consistent Maps
 - Inverse Design of Urban Procedural Models
 - Capturing and Animating the Morphogenesis of Polygonal Tree Models

12:00 – 12:45

- ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
What's New in CUDA 5

12:00 – 13:00

- ▲ E **Recruitment Talk** **Hall 2B, Level 1**
Animal Logic's Recruitment Talk **Exhibitor Talk Stage**

13:00 – 13:45

- ▲ E **Recruitment Talk** **Hall 2B, Level 1**
Double Negative **Exhibitor Talk Stage**
-

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

■ ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
OpenGL ES Performance Tools
and Optimization for Tegra Mobile
Devices

13:00 – 14:00

■ ▲ **Poster Presentation** **Max Atria, Level 2**

14:00 – 14:45

■ ▲ E **Recruitment Talk** **Hall 2B, Level 1**
Contact Singapore **Exhibitor Talk**
Work in Singapore – Global **Stage**
Opportunities in the Interactive &
Digital Media Sector

■ ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
Visual Computing for
Computational Photography and
Computer Vision

14:15 – 16:00

■ ▲ **Special Sessions** **Garnet 217**
The Visual Effects of “The Dark
Knight Rises”

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

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- | | | |
|-----|---|------------------|
| ■ ▲ | Emerging Technologies Talks | Topaz 220 |
| | <ul style="list-style-type: none">- Skeletouch: Transparent Electro-Tactile Display for Mobile Surfaces- Tagtool - A Collaborative Virtual Workspace for Visual Expression- Augmented Satiety: Interactive Nutritional Intake Controller- Dynamic Stereograms based on Eye Convergence for Displaying Multilayered Images- Sound Perfume: Building Positive and Memorable Impression During Face-to-Face Communication- Mixed Reality Mirror Display | |
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Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- **Technical Briefs** **Garnet 219**
Modeling
 - 3D Diff: An Interactive Approach to Mesh Differencing and Conflict Resolution
 - Adaptive Maximal Poisson-Disk Sampling on Surfaces
 - Dynamic 3-D Facial Compression Using Low Rank and Sparse Decomposition
 - Computing Defect-Insensitive Geodesic Distance on Broken Meshes
 - Basic Level Scene Understanding: From Labels to Structure and Beyond
-
- **Technical Papers** **Peridot 206**
Points and Vectors
 - Analysis and Synthesis of Point Distributions based on Pair Correlation
 - Blue Noise through Optimal Transport
 - GPU-accelerated Path Rendering
 - A Vectorial Solver for Free-form Vector Gradients
-

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- **Technical Papers** **Peridot 201**
Video and Image Manipulation
 - Gaze Correction for Home Video Conferencing
 - Discontinuity-Aware Video Object Cutout
 - Video Stabilization using Epipolar Geometry
 - Transfusive Image Manipulation

14:15 – 18:00

- **Courses** **Garnet 212**
Recent Advances in Physically-Based Appearance Modeling of Cloth
-
- **Courses** **Garnet 221**
Polarised Light in Computer Graphics

15:00 – 15:45

- ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
OpenSubdiv: Open Source GPU Rendering of Subdivision Surfaces
-

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

15:00 – 16:00

- ▲ E **Recruitment Talk** **Hall 2B, Level 1**
Industrial Light & Magic Singapore **Exhibitor Talk**
Finding Your Place in the Visual **Stage**
Effects Industry

- ▲ E **Exhibitor Session** **Conference Hall**
Pixar Animation Studios **G – J**
RenderMan 2012 – A Brave New
World: An Overview of Pixar's
Latest Rendering Technology

16:00 – 16:45

- ▲ E **Exhibitor Session** **Conference Hall K**
NVIDIA Corporation
Current Trends in Advanced GPU
Rendering

16:00 – 17:00

- ▲ E **Recruitment Talk** **Hall 2B, Level 1**
Oriental DreamWorks and **Exhibitor Talk**
DreamWorks Animation - **Stage**
Overview & Recruitment Talk

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

16:15 – 18:00

-
- ▲ **Special Sessions** **Garnet 217**
The Most Acclaimed Technical Challenges of Assassin's Creed III: Real-Time Water Simulation and High Level Linear Gameplay Sequences
-
- **Technical Briefs** **Garnet 219**
Invited Session: Facial Animation and Tracking
- The Light Stages and Their Application to Photoreal Digital Actors
 - Measurement and Modeling of Detailed Facial Reflectance
 - Unconventional Approaches for Facial Animation and Tracking
 - The Pipeline of Facial Animation Fast Forward: The NMA Example
 - Lip-Synced Character Speech Animation with Dominated Animeme Models
-

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- ▲ **Emerging Technologies Talks** **Topaz 220**
- FlickInk: Beyond Pen and Paper
 - 2x3D: Real Time Shader for Simultaneous 2D/3D Hybrid Theater
 - Second Surface: Multi-user Spatial Collaboration System based on Augmented Reality
 - Superimposed Skin Pressure Sensor
 - Interactonia Balloon
 - Backward Compatible Stereoscopic Displays via Temporal Psychovisual Modulation

16:15 – 18:15

- **Technical Papers** **Peridot 206**
- Generating and Understanding Models
- All-Hex Meshing using Singularity-Restricted Field
 - Design-Driven Quadrangulation of Closed 3D Curves
 - Field-Guided Registration for Feature-Conforming Shape Composition
 - Structure Recovery by Part Assembly
 - Multi-Scale Partial Intrinsic Symmetry Detection
-

Friday, 30 November

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- **Technical Papers** **Peridot 201**
Stereo and Displays
 - Perspective-Aware Warping for Seamless Stereoscopic Image Cloning
 - Enabling Warping on Stereoscopic Images
 - A Luminance-Contrast-Aware Disparity Model and Applications
 - Correcting for Optical Aberrations using Multilayer Displays
 - The Magic Lens: Refractive Steganography

18:30 – 22:00

- ▲ E **Exhibitor Session** **Topaz 221**
Side Effects Software
Houdini Tips & Tricks

19:00 – 21:00

- **Electronic Theater** **Garnet 217**
-

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- Full Conference/Full Conference One-Day
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08:00 – 18:30

Registration

Foyer 1, Level 1

**SIGGRAPH Asia Merchandise
and Publications**

MAX Atria, Level 2

09:00 – 18:00

■ ▲ **Posters Exhibition**

MAX Atria, Level 2

■ ▲ E **Exhibitor Session**
The Khronos Group
Khronos DevU

Conference Hall K

09:00 – 10:45

■ ▲ **Special Sessions**
Production Workflow on 'Hugo':
A New Model of International VFX

Garnet 217

Saturday, 1 December

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

■ **Technical Papers** **Peridot 206**

- Motion Capture and Synthesis
- Lightweight Binocular Facial Performance Capture under Uncontrolled Lighting
 - Accurate Realtime Full-body Performance Capture Using A Single Depth Camera
 - Data-driven Finger Motion Synthesis for Gesturing Characters
 - A Statistical Similarity Measure for Aggregate Crowd Dynamics

■ **Symposium on Apps** **Tourmaline 207**

- Panel: The Curse of Choice – How Will Users Find My App!?
- Supported by MDA - Official Interactive Content Supporter

09:00 – 12:45

■ **Courses** **Garnet 212**

- Depth Cameras for Computer Graphics

■ ▲ **Animation Theater** **Concourse**

10:00 – 17:00

■ ▲ E **Exhibition** **Exhibition Hall 2B, Level 1**

Saturday, 1 December

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

■ ▲ **Art Gallery** **MAX Atria Foyer,
Level 1**

■ ▲ **Emerging Technologies** **MAX Atria Foyer,
Level 1**

11:00 – 12:00

■ ▲ E **Exhibitor Session** **Conference Hall
G – J**
Pixar Animation Studios
RenderMan 2012 – A Brave New
World: An Overview of Pixar's
Latest Rendering Technology

11:00 – 12:45

■ **Technical Briefs** **Garnet 219**
Methods and Applications

- Scoring Functions for Automatic Arrangement of Business Interiors
- Real-time Manga-Like Depiction Based on Interpretation of Bodily Movements by Using Kinect
- Automatic Chinese Food Identification and Quantity Estimation
- Using Text N-Grams for Model Suggestions in 3D Scenes

Saturday, 1 December

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- **Symposium on Apps** **Tourmaline 207**
Mobile Graphics Techniques -
Hardware and Software
 - Optimizing OpenGL ES
Applications for Mobile Devices
 - Visualizing 3D Models in Aid of
Public ConsultationSupported by MDA - Official
Interactive Content Supporter

-
- **Featured Speakers** **Garnet 217**
The Rise of Computer Graphics
in Asia
Richard Chuang, Cloudpic

11:00 – 13:00

-
- **Technical Papers** **Peridot 206**
Global Illumination
 - A Path Space Extension
for Robust Light Transport
Simulation
 - Light Transport Simulation
with Vertex Connection and
Merging
 - Practical Hessian-Based Error
Control for Irradiance Caching
 - SURE-based Optimization
for Adaptive Sampling and
Reconstruction
 - Adaptive Rendering with Non-
Local Means Filtering
-

Saturday, 1 December

- ▲ Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

13:00 – 14:00

- ▲ **Computer Animation Festival -
Production Session** **Concourse**
Visual Effects of Total Recall

14:15 – 16:00

- ▲ **Special Sessions** **Garnet 217**
The Future of Technology
Innovation at Lucasfilm: Crossover
between Games and Films

- **Technical Briefs** **Garnet 219**
Invited Session: Computer Vision
Meets Computer Graphics
 - An Interactive Editing Tool for
Correcting Panoramas
 - Asset Digitization: Moving
Beyond Facsimile
 - Image-based Clothes
Animation for Virtual Fitting
 - Real-time Contrast Preserving
Decolorization
 - Image Memorability and Visual
Inception

Saturday, 1 December

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- **Technical Papers** **Peridot 206**
Skinning
 - Elasticity-Inspired Deformers for Character Articulation
 - Simulation of Complex Nonlinear Elastic Bodies Using Lattice Deformers
 - RigMesh: Automatic Rigging for Part-Based Shape Modeling and Deformation
 - Smooth Skinning Decomposition with Rigid Bones

-
- **Symposium on Apps** **Tourmaline 207**
Case Studies: Apps for Museums, Kids and Tourists
 - Planning and Developing Museum Apps for Kids
 - Urban Games: Application of Augmented RealitySupported by MDA - Official Interactive Content Supporter

14:15 – 18:00

-
- **Courses** **Garnet 212**
Constructing a Stereo Pipeline from Scratch: Lessons Learned from Disney's "The Secret of the Wings"

-
- ▲ **Animation Theater** **Concourse**
-

Saturday, 1 December

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

15:00 – 16:00

- ▲ E **Exhibitor Session** **Conference Hall**
G – J
Pixar Animation Studios
RenderMan 2012 – A Brave New
World: An Overview of Pixar's
Latest Rendering Technology

16:15 – 18:00

- **Technical Papers** **Peridot 206**
Color and Photos
 - User-guided White Balance for
Mixed Lighting Conditions
 - Calibrated Image Appearance
Reproduction
 - Coherent Intrinsic Images from
Photo Collections
 - Robust Patch-based HDR
Reconstruction of Dynamic
Scenes

- **Electronic Theater** **Garnet 217**



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Saturday, 1 December

- Full Conference/Full Conference One-Day
- ▲ Basic Conference
- E Exhibits Only

-
- **Symposium on Apps** **Tourmaline 207**
Mixing Graphics and the Real World
 - Mobile Mixed Reality Interface Developments
 - GoldFish: Real-world GUI Framework for AndroidSupported by MDA - Official Interactive Content Supporter

19:00 – 21:00

-
- **Electronic Theater** **Garnet 217**
-

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並且在未來獲頒為榮譽 (Honoring)
獲頒獎牌大公開



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一類全新的基於 3D 軟體電子引擎
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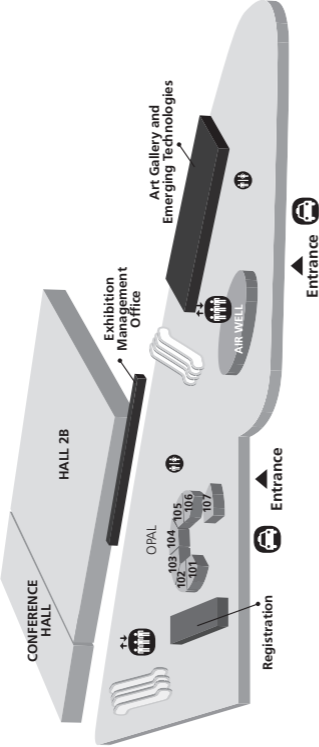
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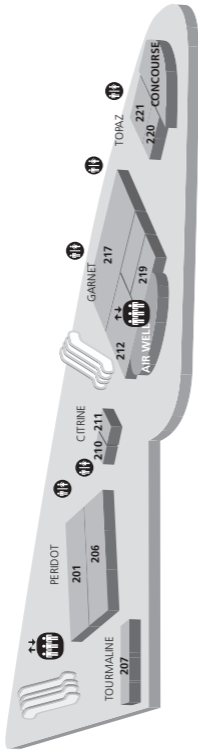
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- Conference Hall** – Exhibitor Sessions
- Exhibition Hall 2B** – Exhibition and Exhibitor Talks
- MAX Atria Foyer** – Art Gallery and Emerging Technologies
- Opal 101** – Conference Management Office
- Opal 102** – Speaker Preparation Room
- Opal 103** – Rehearsal Room
- Opal 104** – Press and Media Room
- Opal 105** – SCOOP Office
- Opal 106** – Student Volunteers Room
- Opal 107** – Conference Management Office Meeting Room

LEVEL 2



Citrine 210 & 211 – Media Interview Rooms

Concourse – Animation Theater

Garnet 212 – Courses

Garnet 217 – Electronic Theater, Featured Speakers, and Special Sessions

Garnet 219 – Technical Briefs

Peridot 201 – Courses and Technical Papers

Peridot 206 – Technical Papers

Topaz 220 – Courses

Topaz 221 – Courses

Tourmaline 207 – Symposium on Apps

Notes

Future Conference Dates

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21 - 25 July 2013

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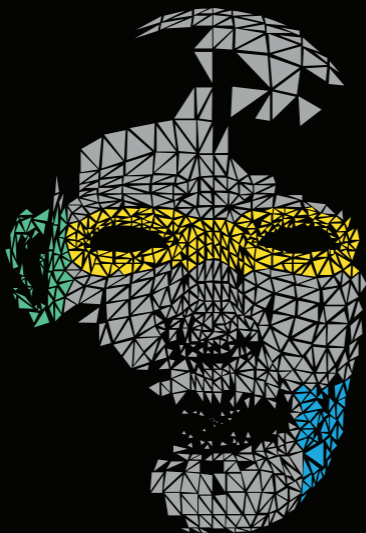
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