“The SIGGRAPH convention is the premier global conference for computer graphics and interactive technologies.”  
NEW YORK TIMES

“…the annual SIGGRAPH conference, a showcase of the latest in computer graphics and a sneak peek at the next generation in the pipeline.”  
EE TIMES

“An eclectic assortment of creative individuals came to experience groundbreaking technology, breathtaking animation and stunning imagery…”  
CREATE MAGAZINE

“A very cerebral show by nature, SIGGRAPH is all about learning and demonstrating new graphics technologies, products, and design techniques.”  
EWEEK.COM

“SIGGRAPH Puts the Future of Computer Animation and Interactive Technology on Display”  
RAVE!

“Five days of peace, love, and pixels.”  
LONGBOAT KEY OBSERVER

“…SIGGRAPH, the computer-graphics Woodstock.”  
NEWSWEEK
# Conference at a Glance

Schedule is subject to change. Check the SIGGRAPH 2006 web site often for updated information for this year’s programs and events.

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<th>SAT, 29 JULY</th>
<th>SUN, 30 JULY</th>
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<td><strong>Registration</strong></td>
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Presentations

Courses
Sunday – Wednesday, 30 July – 2 August

Interdisciplinary instruction by experts from academia and industry who demonstrate the latest techniques, analyze complex algorithms and their implementations, and accelerate understanding of the core concepts in computer graphics and interactive techniques. Courses are presented as brief tutorials, half-day sessions, and intensive full-day sessions. These courses are only available at SIGGRAPH 2006. Complete list of Courses, pages 16 – 21.

Keynote Address and Awards
Monday, 31 July, 1:15 – 3:15 pm

Each year, ACM SIGGRAPH invites a world-class author, executive, artist, thinker, or techno-adventurer to present a provocative perspective on the future of computer graphics and interactive techniques. A sample list of previous keynote presenters includes:

- **Jim Blinn**  
  Microsoft Research

- **Helaman Ferguson**  
  Sculptor & Mathematician

- **Bran Ferren**  
  Walt Disney Imagineering

- **Ray Kurzweil**  
  Inventor & Author

- **Anthony Lasenby**  
  Cambridge University

- **George Lucas**  
  Director, Producer and Screenwriter

In the same session, ACM SIGGRAPH presents its awards for significant achievements in the field: the Computer Graphics Achievement Award to Tom Sederberg, Brigham Young University; the Significant New Researcher Award to Takeo Igarashi, The University of Tokyo; and the Outstanding Service Award to John Fujii, Hewlett Packard Company.

Papers
Monday – Thursday, 31 July – 3 August

Interdisciplinary research achievements in the world’s most prestigious presentation of current work in computer graphics and interactive techniques. Academic and industry investigators explain their groundbreaking, provocative, and important new work. After their talks, most authors are available for informal discussion of their work and its implications. Complete list of Papers, pages 22 – 30.

Panels
Monday – Thursday, 31 July – 3 August

Interrogate the experts and disagree with their detractors. Panelists present brief statements about the issues that energize the computer graphics community, debate the topics, and answer questions from the audience. Complete list of Panels, pages 31 – 34.

Sketches
Monday – Thursday, 31 July – 3 August

Interlace with current research findings and speculative directions in all sub-disciplines of computer graphics and interactive techniques. Scientists, artists, designers, engineers, and visual effects innovators present brief, illustrated talks on their current work. Following each sketch presentation, authors answer questions and discuss future directions. Speakers and topics will be available in June: www.siggraph.org/s2006

Educators Program
Wednesday – Thursday, 2 – 3 August

Intersect with research, methods, and techniques in every aspect of education at every level. Educators and learners present research, summarize projects, and debate approaches in papers, panels, forums, and quicktakes. Detailed information on the Educators Program: www.siggraph.org/s2006

Research Posters
Sunday – Thursday, 30 July – 3 August

Interpersonal encounters with incremental, preliminary, partial, and innovative insights that are important but don’t comprise a full paper by themselves. Posters are displayed throughout the conference week. In scheduled sessions, poster presenters discuss their work and answer questions. Presenters and topics will be available in July: www.siggraph.org/s2006
Presentations

Exhibitor Tech Talks
Interconnect with this year’s breakthrough hardware and software. SIGGRAPH 2006 exhibitors demonstrate the systems you need for another year of achievement in computer graphics and interactive techniques. After the sessions, company experts are available for one-on-one conversations about specific questions and applications. Preliminary list of Exhibitor Tech Talks, page 10.

Special Events

Fast-Forward Papers Preview
Sunday, 30 July, 6 – 8 pm
Snapshot overviews of the paper sessions, in which authors give short summaries of their work. It’s a fast, fun, and provocative preview of the latest and most significant findings in computer graphics and interactive techniques.

Fashion Show 2006
Monday, 31 July, 10 – 11 pm
A runway show featuring the latest convergence of mobile technology and conceptual couture: streetwear and casual, functional garments of innovative materials, fabrication, and design.

ACM Student Research Competition Presentations
Tuesday, 1 August, 10:30 am – 12:15 pm
Winners of the ACM Student Research Competition at SIGGRAPH 2006 present brief summaries of the work they are displaying in the Posters program.

LEGO Mindstorms: The Next Generation
Wednesday, 2 August, 1 – 6:30 pm
Come see what the world’s most innovative robot hobbyists have created with LEGO Mindstorms NXT, the next generation in robot construction kits.

Mitchel Resnick
Massachusetts Institute of Technology, Media Lab
Special Sessions

Intermixture of advanced design, engineering breakthroughs, and deep interactivity. In Special Sessions, leading explorers demonstrate recent achievements in ocean exploration, vehicle performance and marketing, interactive performance, and character animations.

Plugged In: Creating Emotional Responses Through the Use of Entertainment Technology in Live Performance
Monday, 31 July, 4:45 – 6:45 pm

New technologies are influencing the design of performance spaces, spectacles and events. From fireworks displays and fountains to computer graphics and parades, live performance is evolving. In this session, designers, programmers, and producers reveal the evolution of live performance.

Moderator
Tom Craven

Panelists
Don Dorsey
Dorsey Productions, Inc.

Marc Downie
The OpenEnded Group

David Hynds
Walt Disney World Ride & Show Engineering

Tony Freitas
Wet Design

Vrooom Vrooom: SIGGRAPH at 500 Horsepower
Tuesday, 1 August, 4:45 – 6:45 pm

Attendees, start your graphics engines! Cars are now communication devices, entertainment centers, and social statements. From video games and movies to research labs and design centers, cars are evolving faster than ever.

Moderator
Phil Patton
The New York Times

Panelists
Tim Milliron
Pixar Animation Studios

Gary Schultz
Pixar Animation Studios

Eddie Sotto
Sotto Studios/LA

Frans von Holzhausen
Mazda, North American Operations

Smart Cities Group, Massachusetts Institute of Technology, Media Lab

20,000 Bits Under the Sea: How Robotics, Visualization, and Scientific Computing Are Changing the Way We Explore, Discover, and Understand Our Oceans
Wednesday, 2 August, 1:45 – 3:45 pm

Oceans cover more than 70% of our planet, yet more is known about outer space. Computer graphics, robotics, user-interface design, visualization, and scientific computing are changing how oceanographers explore the deep.

Panelists
Alan D. Chave
Woods Hole Oceanographic Institution/Deep Submergence Laboratory

Graham Hawkes
Hawkes Ocean Technologies

Chris Henze
NASA Advanced Supercomputing Division

Chris Hill
Massachusetts Institute of Technology, Department of Earth, Atmospheric, and Planetary Sciences

Sounding Off: How Voice Talents Bring Characters to Life in CG Film
Wednesday, 2 August, 4:45 – 6:45 pm

Voice casting, recording, and animation are an integral part of CG character development. Join this exploration of how major studios and talents use different approaches and techniques to integrate voice performance with computer graphics to create emotionally resonant computer-generated characters and stories.

Panelists
Blue Sky Studios
Pixar Animation Studios
Sony Pictures Animation
Experiences

Art Gallery: Intersections
Sunday – Thursday, 30 July – 3 August

Intersect with art that explores new territories, crosses traditional boundaries, provokes thought, reveals ideas in innovative ways, and addresses contemporary issues. Intersections features 2D, 3D, and 4D wall-hung works, sound art, installation art, art animations, and screen-based work from throughout the world. Intersections also includes presentations of theoretical art papers, digital art panels, and art sketches (short presentations). For detailed information on the Art Gallery: Intersections, visit: www.siggraph.org/s2006

Electronically Mediated Performances
Enjoy internationally famous performances that utilize technology to create multi-sensory experiences that amaze, amuse, and dazzle the audience on multiple levels. The performances include dance, theater, music, performance art, and hybrid forms that merge various disciplines.

Charles A. Csuri
Explore this extensive retrospective exhibition featuring Csuri’s art from 1963 to the present, including his first plotter drawing, real-time animations, newly rediscovered works from the early period, recent examples from the Infinity Series, and more. Csuri is recognized as the father of digital art and computer animation by Smithsonian Magazine and as a leading pioneer of computer animation by the Museum of Modern Art.

Computer Animation Festival

Animation Theaters
Sunday – Thursday, 30 July – 3 August

Electronic Theater
Monday – Wednesday, 31 July – 2 August

Electronic Theater Matinée
Tuesday – Wednesday, 1 – 2 August

Interweave your senses with this year’s finest film and video achievements by the world’s most creative scientists, entertainers, superstars, vagabonds, studios, and students. The Computer Animation Festival presents selected works in the Electronic Theater (matinée and evening shows) and the Animation Theater (throughout the week).

The Computer Animation Festival jury selected two award winners from 726 entries for exemplary use of computer-generated imagery and animation, and compelling storytelling. For the past two years, the Best in Show recipient has been a nominee for an Academy Award.

SIGGRAPH 2006 Computer Animation Festival award winners:

One Rat Short (Best of Show)
Alex Weil
Charlex
United States

458nm (Special Jury Honors)
Jan Bitzer, Ilija Brunck, Tom Weber
Filmakademie Baden-Württemberg
Germany

For a complete list of Computer Animation Festival accepted work, visit: www.siggraph.org/s2006

Emerging Technologies
Sunday – Thursday, 30 July – 3 August

Interact with the interplay between humans and digital systems. Emerging Technologies demonstrates the future of interactive techniques in scientific visualization, robotics, medicine, biotechnology, music, audio, entertainment, fountains, services for the disabled, graphics, displays, haptics, sensors, gaming, the web, artificial intelligence, visualization, collaborative environments, design, aerospace, the military, and the fusion of technology and art. For detailed information on the Emerging Technologies exhibits, visit: www.siggraph.org/s2006
Services

- **Birds of a Feather**
  - **Sunday – Thursday, 30 July – 3 August**
  - Interconnect with others who share your interests, goals, technologies, environments, or backgrounds. Questions? Review the Birds of a Feather FAQs at: www.siggraph.org/s2006
  - To schedule a Birds of a Feather session prior to arrival, fill out the Meeting Space Request Form online.

- **Get Involved**
  - **Tuesday, 1 August, 5 – 6:30 pm**
  - Interview the volunteers who organize the annual SIGGRAPH conference and discover how you can contribute your expertise and energy. All attendees, exhibitors, and presenters are invited. All questions and comments are welcome.

- **International Resources**
  - **Sunday – Thursday, 30 July – 3 August**
  - Intertwine with real teapots, virtual teapots, and teapot-inspired images that showcase the long association of the teapot with computer graphics, art, and Boston. The teapot exhibit includes juried and curated work by computer scientists, artists, and designers from around the world.

- **Job Fair**
  - **Tuesday – Thursday, 1 – 3 August 10 am – 4 pm**
  - The SIGGRAPH Conference Job Fair returns in 2006 with extended hours and expanded offerings. The Job Fair is produced by CreativeHeads.net, The Job Board for professionals in the video game, animation, VFX, TV, film, and software tools and technology industries.
  - All registered SIGGRAPH 2006 attendees are welcome to attend the Job Fair at no additional cost. For details, see page 36.

- **Pathfinders**
  - **Sunday – Thursday, 30 July – 3 August**
  - Maximize your visit to SIGGRAPH 2006. At the Pathfinders booth, veteran attendees provide free, friendly advice on how to find everything that’s important to you. If you have questions before the conference, have feedback to offer, or would like to volunteer a couple hours of your time to help us out, please send email to: pathfinders@siggraph.org
Exhibition

Over 250 of the world’s leading companies from five continents in computer graphics and interactive techniques will be available at only one time and place: SIGGRAPH 2006 in Boston.

**Attendees** This is your exclusive opportunity to learn about all the products and services you need for another year of creative achievement in one place. Try the latest systems, talk with the people who developed them, and get all the information you need to make budget and purchase decisions. For the most complete list of SIGGRAPH 2006 exhibitors, visit: [www.siggraph.org/s2006](http://www.siggraph.org/s2006)

**Exhibitors** This is your only annual opportunity to demonstrate your products and services in the world’s only trade show devoted exclusively to the global market for computer graphics and interactive techniques.

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*Increase Your Visibility – Become a SIGGRAPH 2006 Sponsor.*

SIGGRAPH 2006 sponsorship is the best way to add muscle to your message.

To purchase exhibition space or learn about our customized sponsorship opportunities for SIGGRAPH 2006, call or write:

SIGGRAPH 2006 Exhibition Management
Hall-Erickson, Inc.
98 East Naperville Road
Westmont, Illinois 60559 USA
exhibits@siggraph.org

+1.630.434.7779
+1.630.434.1216 fax
Exhibitors
As of 31 March 2006

1 Beyond, Inc.
3D Systems, Inc.
Academic Superstore LP
Academy of Art University
Act-3D, B.V.
Addison-Wesley-New Riders Publishing
Adobe Systems Incorporated
AKA Video Systems
Akasaka Natural Vision Research Center
AMAX Information Technologies
AMD Micro Devices, Inc.
American Paper Optics, Inc.
Anark Corporation
Andersson Technologies LLC
Animation Magazine Inc.
Anthro Corporation
Anzovin Studio
Artbeats, Inc.
ASC-American Cinematographer
ATI Technologies Inc.
auto.des.sys, Inc.
Autodesk, Inc.
Avid Technology, Inc.
B&H Photo-Video
Ballistic Media Pty. Ltd.
Bitboys Oy
Blue Sky Studios, Inc.
BlueArc Corporation
BOXX Technologies, Inc.
BrightSide Technologies Inc.
CADD Edge, Inc.
cebas Computer GmbH
Center for Computation & Technology at Louisiana State University
Ciprico, Inc.
Cogswell Polytechnical College
Computer Graphics World
Corel Corporation
Create Magazine
Criterpix
Cycling ’74
DataDirect Networks Inc.
DAZ Productions, Inc.
Digital Artist Management Inc/DAM Consultants, Inc.
Digital Media Arts College
Digital Media Professional Inc.
Digital Video Systems GmbH
Dimension 3D Printing
DreamWorks Animation SKG
Drexel University
e frontier, Inc.
Education Management Corporation/
The Art Institutes
Electronic Arts Inc.
e-on software, inc.
eyeon Software Inc.
FiatLux Corporation/KGT
Florida Interactive Entertainment Academy
GenArts, Inc.
Gibbs College
Gnomon, Inc.
Google
Hash, Inc.
Hewlett-Packard Development Company, L.P.
IdN Magazine
iDT Entertainment
IEEE Computer Society
Immersion Corporation
Immersive Media Corp.
InSpeck Inc.
IntegrityWare, Inc.
International Academy of Design & Technology
InterSense
Islion Systems, Inc.
John Wiley & Sons, Inc.
JourneyEd.com
LAIKA Entertainment
Lucas Arts Entertainment Co.
Massive Software
MAXON Computer Inc.
MediaLab
Mercury Computer Systems, Inc.
Meta Motion
Mitsubishi Electric Research Laboratories
Mitsue-Links Co., Ltd.
Morgan Kaufmann Publishers
Motion Analysis Corporation
MOVA LLC
National Animation & Design Centre
NEC Display Solutions of America Inc.
New York University - CADA
NewTek, Inc.
Nexstar
Next Limit Technologies
NVIDIA Corporation
Ohio University School of Telecommunications
Okino Computer Graphics, Inc.
Oracl Hi Tec Systems Ltd.
P.I. Engineering, Inc.
PipeLineFx, LLC
Pixar Animation Studios
Pixologic, Inc.
PNY Technologies, Inc.
Point Grey Research, Inc.
Post Magazine
(COP Communications, Inc.)
Primedia Business Magazines & Media
Purdue University, Department of Computer Graphics Technology
Radical Entertainment Inc.
RealVulsion Inc.
REALVIZ S.A.
Rhythm & Hues Studios
Ringling School of Art and Design
Robert McNeel & Associates
Rochester Institute of Technology
Savannah College of Art and Design
Side Effects Software Inc.
Solid Modeling Solutions
SolidScape, Inc.
SolidWorks Corporation – Dassault Systems
Sony Pictures Imageworks Inc.
SpheronVR AG
Spine3D
Springer
Stash Media Inc.
Stratasys Inc.
Sybex, An Imprint of Wiley
SyFlex LLC
Tech Data Corporation
TechViz
Texas Memory Systems
The Center for Digital Imaging Arts at Boston University
The CGAL Project
The Cleveland Institute of Art
The Guildhall at SMU
The MIT Press
The Orphanage Inc.
The3Dshop.com
Thomson Course Technology
Tobi Technology AB
Toon Boom Animation, Inc.
Total Immersion
University of Massachusetts Dartmouth
Valenciennes Digital/Superinfocom
Vancouver Film School
Virtools SA
VisMasters
Visual Media, LLC
Wacom Technology Co.
Walt Disney Animation
Web3D Consortium, Inc.
Westbridge Film School
Weta Digital Ltd.
Wolfram Research, Inc.
wondertouch, LLC
Worldwide FX
Xerox Corporation
Yorkshire Forward
Z Corporation
Zygote Media Group, Inc.

Important Notice
Registered attendees under the age of 16 must be accompanied by an adult at all times throughout the Boston Convention & Exhibition Center, except for the Exhibition, where children under 16 are not permitted. Age verification is required for the Exhibition.
Exhibitor Tech Talks

Interconnect with this year’s breakthrough hardware and software. SIGGRAPH 2006 exhibitors demonstrate the systems you need for another year of achievement in computer graphics and interactive techniques. After the sessions, company experts are available for one-on-one conversations about specific questions and applications.

Training for Careers in Animation and Technology
Vancouver Film School
Wednesday, 2 August, 12:30 – 2:30 pm

Interested in a career in the world of animation? This session includes a screening of outstanding student work, a comprehensive overview of the Vancouver Film School’s classical & 3D animation programs, admissions requirements, discussion of career opportunities, and a question-and-answer period.

X3D: The 3D Solution for Web, Documents, and Real-Time Applications
Web3D Consortium
Wednesday, 2 August, 3:30 – 5:30 pm

The X3D standard has evolved over 10 years while other 3D standards have come and gone. X3D is growing with content and applications from a variety of sectors and across a variety of hardware platforms. It is turning out to be not only viable, but it also has a vibrant, dynamic, and innovative community and application developers who see this standard as the ideal format for archivable, real-time 3D graphics. See the latest real-world applications and content, and find out just how useful X3D can be for your 3D graphic needs.

Exhibitor Sessions

NVIDIA
Next-Generation Effects
Wednesday, 2 August, 9:45 – 10:30 am

With Windows Vista, developers have access to unprecedented flexibility and processing power. This presentation shows how these new capabilities can be put to good use.

Physics on NVIDIA GPUs
Wednesday, 2 August, 11 am – noon

Havok FX leverages state-of-the-art software and hardware technology from NVIDIA to extend the capabilities of NVIDIA GPUs and SLI multi-GPU systems to include physics processing for massive real-time effects. In this presentation, NVIDIA and Havok engineers describe how Havok FX utilizes NVIDIA technology to simulate and render thousands of particles and rigid bodies in games. Live real-time demos demonstrate the high performance available with current GPUs and provide a look into the future of physics processing on NVIDIA GPUs.

State-of-the-Art Cross-Platform Shader Development with FX Composer 2
Wednesday, 2 August, 1 – 2 pm

Now supporting both OpenGL and DirectX, FX Composer 2 provides a state-of-the-art integrated development environment for shader authoring in CG and HLSL through COLLADA FX. Learn all about FX Composer 2’s features, including shader profiling support, artist-friendly tweakables, scripting support, custom plug-in architecture, and much more.

NVIDIA Demo Team
Wednesday, 2 August, 2:15 – 3 pm

NVIDIA’s Demo Team presents techniques and tricks used in the most recent demo applications.

Optimize Your GPU with the Latest NVIDIA Performance Tools
Wednesday, 2 August, 3:30 – 4:45 pm

This talk showcases NVIDIA’s latest suite of GPU performance-analysis tools for OpenGL and DirectX, including NVPerfKit and NVShaderPerf. Learn how to use NVPerfKit to find and remove bottlenecks with NVPerfHUD, access powerful GPU performance counters with NVPerfSDK, and identify OpenGL API usage and performance errors with GLExpert. Handheld developers will get a brief look at NVPerfHUD ES, a new performance tool for handheld GPUs. Also, learn how to tune your fragment programs using NVShaderPerf.
International Resources

In the International Center, the multi-lingual International Resources Committee answers attendee questions, hosts presentations for attendees from specific countries and regions, offers space for talks and demonstrations, and provides informal translation services.

**International Committee**

- **Chair**
  Kirsten Cater
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  University of Bristol
cater@siggraph.org

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  MYTLEE@ntu.edu.sg
Co-Located Events

The annual SIGGRAPH conference is expanding the number and breadth of co-located workshops and small conferences. Four events are co-located with SIGGRAPH 2006:

APGV 06: Third Symposium on Applied Perception in Graphics and Visualization
28 - 30 July 2006
Hyatt Regency Boston
Boston, Massachusetts USA

Research in computer graphics and visualization has great potential to benefit from, and contribute to, research in perception. Since 2004, this symposium has brought together researchers from the fields of perception, graphics, and visualization to facilitate a wider exchange of ideas. Our goals are to use insights from perception to advance the design of methods for visual, auditory, and haptic representation, and to use computer graphics to enable perceptual research that would otherwise not be possible.

For more information and registration: http://www.apgv.org/

International Workshop on Volume Graphics
30 - 31 July 2006
Boston Park Plaza Hotel
Boston, Massachusetts USA

Following successful workshops in Swansea (1999), Stony Brook (2001), Tokyo (2003), and Stony Brook again (2005), the 5th International Workshop on Volume Graphics, VG06, will take place in Boston in July 2006. VG06 brings together academic and industry researchers who are working, or wish to work, on volume graphics (modeling, processing, and rendering data that are typically acquired through analytical methods, medical scanners, computational simulations, or statistical measurements). Volume graphics is capable of modeling solid as well as amorphous objects, and interiors as well as surfaces, and it synthesizes graphical images in a true 3D manner. The workshop will continue to explore the potential of volume-based techniques beyond the scope of volume visualization as it is currently practiced.

For more information and registration: http://vg.swan.ac.uk/vg06/

Sandbox: An ACM Video Game Symposium
29 - 30 July 2006
Boston Marriott Copley Place
Boston, Massachusetts USA

The Sandbox symposium includes keynotes, panels, papers, and, a Hot Games session that previews unreleased titles from major game companies and independent developers.

Video games are a singular technological medium, comparable in cultural impact to the telephone, television, or the internet. How can we advance the state of technology while ensuring that the medium flourishes? What role do independent developers play in maintaining diversity and creativity in this medium? How do video games affect societies and individuals?

For more information and registration: http://sandboxsymposium.org/

Symposium on Point-Based Graphics 2006
29 - 30 July 2006
Boston Park Plaza Hotel
Boston, Massachusetts USA

The IEEE/Eurographics Symposium on Point-Based Graphics (PBG) is a forum for presenting new results related to the use of point-based primitives in modeling, rendering, data acquisition, simulation, geometry, and graphics hardware. Building on the successful PBG 2004 in Zürich and PBG 2005 in Stony Brook, the next symposium is co-located with SIGGRAPH 2006 in Boston.

For more information and registration: http://graphics.ethz.ch/PBG06/

Inquiries about co-locating events with the annual SIGGRAPH conference should be directed to:

Alyn Rockwood
ACM SIGGRAPH Vice President
alyn_rockwood@siggraph.org

Call for Volunteers

ACM SIGGRAPH relies heavily on volunteers to plan and produce the premier international conference on computer graphics and interactive techniques. Volunteer opportunities for this vibrant event include: future conference chairs, SIGGRAPH 2007 sub-committee members. SIGGRAPH 2008 program chairs, and additional on-site volunteers for most years. Explore how you can contribute your ideas, energy, and expertise at: www.siggraph.org/volunteering
## Conference Schedule

### Sunday, 30 July

<table>
<thead>
<tr>
<th>Time</th>
<th>Events</th>
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| 8:30 am – 12:15 pm | - Course 7: Beyond One Perspective: Using Video Camera Arrays for Graphics  
- Course 8: An Interactive Introduction to OpenGL Programming  
- Course 9: The Art of Open Season: Traditional 2D Styling With Today’s Bells and Whistles |
| 8:30 am – 5:30 pm  | - Course 1: Discrete Differential Geometry: An Applied Introduction  
- Course 2: Interactive Shape Editing  
- Course 3: GPU Shading and Rendering  
- Course 4: State of the Art in Interactive Ray Tracing  
- Course 5: High-Dynamic-Range Imaging: Theory and Applications  
- Course 6: Illustrative Visualization for Medicine and Science  
- Research Posters |
| 1 – 6 pm         | - Animation Theaters  
- Art Gallery: Intersections  
- Emerging Technologies  
- Guerilla Studio |
| 1:45 – 5:30 pm   | - Course 10: Procedural Modeling of Urban Environments  
- Course 11: “The Chronicles of Narnia”: The Lion, The Crowds, and Rhythm & Hues  
- Course 12: Digital Modeling of the Appearance of Materials |
| 6 – 8 pm         | - Special Event: Fast-Forward Papers Preview |

### Monday, 31 July

<table>
<thead>
<tr>
<th>Time</th>
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</tr>
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</table>
| 8:30 – 10:15 am | - Papers: Sampling and Ray Tracing  
- Papers: Image Processing |
| 8:30 am – 12:15 pm | - Course 13: Surface Modeling and Parameterization With Manifolds  
- Course 14: Fluid Simulation  
- Course 15: Computational Photography  
- Course 16: OpenKODE: An Open Mobile Media Development Environment  
- Course 17: Physically Based Reflectance for Games  
- Course 18: An Introduction to Sketch-Based Interfaces |
| 8:30 am – 5:30 pm | - Research Posters |
| 9 am – 6 pm | - Animation Theaters  
- Art Gallery: Intersections  
- Emerging Technologies  
- Guerilla Studio |
| 10:30 am – 12:15 pm | - Papers: Shape Matching and Symmetry  
- Papers: Shape Modeling and Textures  
- Sketches |
| 1:15 – 3:15 pm | - Keynote Address/Awards |
| 3:45 – 5:30 pm | - Course 19: Spatial Augmented Reality  
- Course 20: QTKit: A Modern Framework for Multimedia Applications  
- Course 21: Taxonomy of Digital Creatures: Defining Character Development Techniques Based Upon Scope of Use  
- Course 22: Résumés and Demo Reels: If Yours Aren’t Working Neither Are You!  
- Course 23: The Web as a Procedural Sketchbook  
- Panel: Digital Rights, Digital Restrictions  
- Sketches |
| 3:45 – 6 pm   | - Papers: Image Manipulation |
| 4:45 – 6:45 pm | - Special Session: Plugged In: Creating Emotional Responses Through the Use of Entertainment Technology in Live Performance |
| 7 – 9 pm      | - Electronic Theater |
| 9 pm – 2 am   | - Professional and Student Chapter’s Party |
Tuesday, 1 August

8:30 – 10:15 am
• Papers: Surfaces

8:30 am – 12:15 pm
• Course 28: Recreational Computer Graphics

8:30 am – 5:30 pm
• Course 24: Exploiting Perception in High-Fidelity Virtual Environments
• Course 25: RenderMan for Everyone
• Course 26: Advanced Real-Time Rendering in 3D Graphics and Games
• Course 27: The Art of Story Telling
• Research Posters
• Sketches

9 am – 6 pm
• Animation Theaters
• Art Gallery: Intersections
• Emerging Technologies
• Guerilla Studio

9:30 am – 6 pm
• Exhibition & Exhibitor Tech Talks

10 am – 4 pm
• Job Fair

10:30 am – 12:15 pm
• Papers: HDR and Systems
• ACM Student Research Competition Presentations

1:30 – 3:30 pm
• Electronic Theater Matinée

1:45 – 3:30 pm
• Papers: Appearance Representation
• Panel: So You Want to Create Content: Licenses, Copyrights, and Other Things to Think About

1:45 – 5:30 pm
• Course 34: The Invisible Actor
• Course 35: Developing Mobile 3D Applications With OpenGLES and M3G
• Course 36: Spatial Displays and Computer Graphics

3:45 – 5:30 pm
• Papers: Matting & Deblurring
• Panel: Ethics in Image Manipulation

4:45 – 6:45 pm
• Special Session: Vroom Vroom: SIGGRAPH at 500 Horsepower

5 – 6:30 pm
• Get Involved

7 – 9 pm
• Electronic Theater

Wednesday, 2 August

8 – 8:15 am
• Educators Program: Ramp In

8:30 – 9:30 am
• Educators Program Panel
• Educators Program Papers

8:30 – 10:15 am
• Papers: Fluids
• Papers: Image Collections

8:30 am – 5:30 pm
• Course 29: Geometric Modeling Based on Triangle Meshes
• Course 30: Performance-Driven Facial Animation
• Research Posters
• Sketches

9 am – 6 pm
• Animation Theaters
• Art Gallery: Intersections
• Emerging Technologies
• Guerilla Studio

9:30 – 10 am
• Educators Program Paper

9:30 – 10:30 am
• Educators Program Panel

9:30 am – 10:30 am
• Educators Program Panel

10 am – 4 pm
• Job Fair

10:30 – 11 am
• Educators Program Paper

10:30 – 11:30 am
• Educators Program Panel

10:30 am – 12:15 pm
• Papers: Motion Capture
• Papers: Image Capture
• Panel: Video Games: Content and Responsibility

11 am – noon
• Educators Program Panel

11:30 am – noon
• Educators Program Paper

1 – 2 pm
• Educators Program Panel

1 – 6:30 pm
• LEGO Mindstorms

1:30 – 3:30 pm
• Electronic Theater Matinée

1:45 – 3:45 pm
• Special Session: 20,000 Bits Under the Sea: How Robotics, Visualization, and Scientific Computing Are Changing the Way We Explore, Discover, and Understand Our Oceans
Wednesday, 2 August (continued)

2 – 3 pm
• Educators Program Papers

3 – 3:30 pm
• Educators Program Panel

3 – 3:45 pm
• Educators Program Quicktakes

3:30 – 5 pm
• Educators Program Papers

3:45 – 5:30 pm
• Papers: Precomputed Transfer
• Panel: Is a Career in Computer Graphics Possible? Part 2: Dedication and Expectation

4 – 5:30 pm
• Educators Program Panel

4:45 – 6:45 pm
• Special Session: Sounding Off: How Voice Talents Bring Characters to Life in CG Film

5 – 5:30 pm
• Educators Program Quicktakes

5:30 – 6 pm
• Educators Program Paper

7 – 9 pm
• Electronic Theater

8 – 10 pm
• Reception: Seaport World Trade Center

Thursday, 3 August

8 – 8:30 am
• Educators Program Papers

8 – 9 am
• Educators Program Quicktake Panel

8:30 – 9 am
• Educators Program Quicktakes

8:30 – 10:15 am
• Papers: Appearance Modeling
• Papers: Meshes

8:30 am – noon
• Research Posters

8:30 am – 5:30 pm
• Sketches

9 am – noon
• Educators Program Papers

9 am – 5 pm
• Animation Theaters
• Art Gallery: Intersections
• Emerging Technologies
• Guerilla Studio

9:30 am – 3:30 pm
• Exhibition & Exhibitor Tech Talks

10 am – 4 pm
• Job Fair

10:30 – 11:30 am
• Educators Program Panel

10:30 am – 12:15 pm
• Papers: Light Transport
• Papers: Shape Deformation

1 – 2 pm
• Educators Program Forum

1 – 3:30 pm
• Educators Program Papers

1:45 – 3:30 pm
• Papers: Numerical and Geometric Algorithms and Crowds
• Papers: Animation

2 – 2:30 pm
• Educators Program Paper

2:30 – 3:30 pm
• Educators Program Forum

3:30 – 4:15 pm
• ACM Student Research Competition Recognition

3:45 – 5:30 pm
• Papers: Non-Photorealistic Rendering

4:15 – 5 pm
• Educators Program Ramp Out
Courses

**interdisciplinary** instruction by experts from academia and industry who demonstrate the latest techniques, analyze complex algorithms and their implementations, and accelerate understanding of the core concepts in computer graphics and interactive techniques. Courses are presented as brief tutorials, half-day sessions, and intensive full-day sessions.

For detailed information on all SIGGRAPH 2006 Courses, visit: www.siggraph.org/s2006

Full Conference registration allows attendees access to all SIGGRAPH 2006 Courses. All the Course Notes are on the Full Conference DVD-ROM that Full Conference attendees receive with their registration. For additional information on the level of experience and education required to make best use of the instruction offered in each course, see the SIGGRAPH 2006 web site: www.siggraph.org/s2006

Seating in Courses is on a first-come, first-served basis. Please be sure to arrive early for the Courses you wish to attend.
Sunday, 30 July

1 **Discrete Differential Geometry: An Applied Introduction**
   Sunday, Full-Day, 8:30 am - 5:30 pm
   LEVEL: ADVANCED
   An introduction to fundamentals of discrete differential geometry (DDG), a nascent area of computational science with exciting simulation and geometry processing applications. Lectures discuss continuous and discrete geometry in the context of cloth, shell, and fluid simulation as well as remeshing and parameterization problems.
   
   Co-Organizers
   Eitan Grinspun
   Columbia University
   Mathieu Desbrun
   California Institute of Technology

2 **Interactive Shape Editing**
   Sunday, Full-Day, 8:30 am - 5:30 pm
   LEVEL: INTERMEDIATE
   The state of the art in digital modeling techniques, both in commercial software and academic research. The goal of this course is to give attendees an understanding of the big open questions and the skills to engineer recent research in interactive shape-modeling applications.
   
   Organizer
   Marc Alexa
   Technische Universität Berlin

3 **GPU Shading and Rendering**
   Sunday, Full-Day, 8:30 am - 5:30 pm
   LEVEL: INTERMEDIATE
   Programmable graphics hardware has found its way into almost every PC and game console sold today. This course features the latest exciting developments in shading hardware, a practical comparison of shading languages, and a glimpse of hardware shading returning to its production rendering roots.
   
   Organizer
   Marc Olano
   University of Maryland, Baltimore County

4 **State of the Art in Interactive Ray Tracing**
   Sunday, Full-Day, 8:30 am - 5:30 pm
   LEVEL: ADVANCED
   Recent improvements in computer hardware have allowed ray tracing to be used in some interactive applications. The trends in architecture and expansions of geometric model should increase the use of interactive ray tracing. This course presents recent and often not-yet published work on interactive ray tracing.
   
   Organizer
   Peter Shirley
   University of Utah
   Philipp Slusallek
   Universität des Saarlandes

5 **High-Dynamic-Range Imaging: Theory and Applications**
   Sunday, Full-Day, 8:30 am - 5:30 pm
   LEVEL: INTERMEDIATE
   New techniques in capturing, representing, processing, and displaying high-dynamic-range (HDR) images. HDR imagery represents the full range of light in the real world, which enables marked improvements in visual fidelity and photorealism. Application areas include lighting, compositing, film, game design, and display hardware.
   
   Co-Organizers
   Paul Debevec
   USC Centers for Creative Technologies
   Erik Reinhard
   University of Bristol & University of Central Florida

6 **Illustrative Visualization for Medicine and Science**
   Sunday, Full-Day, 8:30 am - 5:30 pm
   LEVEL: INTERMEDIATE
   Research and recent development in computer-generated illustration techniques within non-photorealistic rendering. The course concentrates specifically on illustration methods for computer-generated technical, scientific, medical, and interactive illustrations of both surface and volumetric data. It also presents the perspective of two medical illustrators on computerized illustration.
   
   Co-Organizers
   David S. Ebert
   Purdue University
   Mario Costa Sousa
   University of Calgary
Sunday, 30 July

7  Beyond One Perspective: Using Video Camera Arrays for Graphics
   Sunday, Half Day, 8:30 am - 12:15 pm
   LEVEL: INTERMEDIATE

   Capture, analysis, and rendering of dynamic, real-world scenes and phenomena using multiple video cameras. This course describes hardware, calibration, and algorithms. Topics include modeling dynamic geometry and volumetric phenomena (such as smoke and fire); high-quality, real-time, video-view interpolation; and spatio-temporal view interpolation.

   Co-Organizers
   Marcus Magnor
   Technische Universität Braunschweig

   Bennett Wilburn
   Microsoft Research Asia

8  An Interactive Introduction to OpenGL Programming
   Sunday, Half Day, 8:30 am - 12:15 pm
   LEVEL: BEGINNING

   This course provides the knowledge that a novice OpenGL programmer needs to author interactive, 3D graphics applications using OpenGL. It covers fundamental topics such as modeling, lighting, depth buffering, and texture mapping, and introduces advanced topics such as using vertex and fragment programs.

   Organizer
   Ed Angel
   University of New Mexico

9  The Art of Open Season: Traditional 2D Styling With Today’s Bells and Whistles
   Sunday, Half Day, 8:30 am - 12:15 pm
   LEVEL: BEGINNING

   A detailed behind-the-scenes view of how a team of digital artists and technicians can work closely with a team of talented traditional storytellers and artists to create a feature animated film. The course demonstrates how the most advanced technology and tools were developed from concept to screen.

   Organizer
   Sande Scoredos
   Sony Pictures Imageworks

Sunday, 30 July

10 Procedural Modeling of Urban Environments
   Sunday, Half Day, 1:45 - 5:30 pm
   LEVEL: INTERMEDIATE

   Procedural modeling techniques for creation of highly detailed three-dimensional urban models in computer games and movies. The course covers problems associated with modeling street layouts, land-use systems, and architecture. It combines new research from academia and state-of-the-art industrial modeling practices.

   Co-Organizers
   Ben Watson
   North Carolina State University

   Peter Wonka
   Arizona State University

11 “The Chronicles of Narnia”: The Lion, The Crowds, and Rhythm & Hues
   Sunday, Half Day, 1:45 - 5:30 pm
   LEVEL: INTERMEDIATE

   For its work on “The Chronicles of Narnia,” Rhythm & Hues created a new work flow, new tools, and new procedures. This course offers a detailed look at the production, from Aslan to the crowds of mythological creatures in the battle. Detailed topics include proprietary software, pipeline, rigging, fur, dynamics, crowds, and more.

   Organizer
   Brad Hiebert
   Rhythm & Hues Studios

12 Digital Modeling of the Appearance of Materials
   Sunday, Half Day, 1:45 - 5:30 pm
   LEVEL: BEGINNING

   Realistic computer graphics rendering requires modeling the appearance of physical materials. This course covers the range of techniques for specifying materials, including classifying physical materials by observation, basic mathematical representation, modeling material appearance change over time, and integrating material models into rendering systems.

   Organizer
   Holly Rushmeier
   Yale University
Monday, 31 July

13
Surface Modeling and Parameterization With Manifolds
Monday, Half Day, 8:30 am - 12:15 pm
LEVEL: INTERMEDIATE

What do configuration spaces of animation skeletons, a subdivision surface, and a panorama have in common? All of these are examples of manifolds. The goal of this course is to present an overview of manifold constructions that are useful for graphics applications, with a focus on two-dimensional manifolds (surfaces).

Organizer
Cindy Grimm
Washington University in St. Louis

14
Fluid Simulation
Monday, Half Day, 8:30 am - 12:15 pm
LEVEL: ADVANCED

Animating fluids like water, smoke, and fire by physics-based simulation is increasingly important in visual effects and is starting to make an impact in real-time games. This course goes from the basics of 3D fluid flow to the state of the art in graphics. Attendees will learn the core concepts of fluid flow, cutting-edge techniques, and implementation details. Slides, notes, and (where possible) example code will be provided.

Organizer
Robert Bridson
The University of British Columbia

15
Computational Photography
Monday, Half Day, 8:30 am - 12:15 pm
LEVEL: INTERMEDIATE

Computational methods for overcoming the traditional limitations of a camera and enabling novel imaging applications. The course provides a practical guide to topics in image capture and manipulation methods for generating compelling pictures for computer graphics and for extracting scene properties for computer vision, with several examples.

Co-Organizers
Ramesh Raskar
Mitsubishi Electric Research Laboratories (MERL)
Jack Tumblin
Northwestern University

Monday, 31 July

16
OpenKODE: An Open Mobile Media Development Environment
Monday, Half Day, 8:30 am - 12:15 pm
LEVEL: INTERMEDIATE

OpenKODE is an open, cross-platform, royalty-free development environment for mobile media. This cohesive framework includes APIs for 3D graphics, scalable vector graphics, video, audio, and an open digital-asset schema designed for interactive applications. This course provides an overview of each of OpenKODE’s constituent technologies.

Organizer
Randi Rost
3Dlabs

17
Physically Based Reflectance for Games
Monday, Half Day, 8:30 am - 12:15 pm
LEVEL: INTERMEDIATE

How to use the physical principles of reflectance to increase game realism while acknowledging real-world production issues such as performance and ease of content creation. In this course, game developers learn how to incorporate realistic reflectance in their games, and graphics researchers learn how to evaluate the applicability of their research to game development.

Organizer
Nathaniel Hoffman
Naughty Dog, Inc.

18
An Introduction to Sketch-Based Interfaces
Monday, Half Day, 8:30 am - 12:15 pm
LEVEL: BEGINNING

Sketch-based interfaces are a natural, pencil-and-paper-like approach to interacting with a variety of applications, including conceptual modeling, animation, and notetaking systems. This course offers an in-depth discussion of sketch-based interface design, ranging from simple gestural commands to complex sketch-understanding systems. Attendees will learn how these interfaces are designed and how to develop their own.

Organizer
Joseph LaViola
Brown University
Monday, 31 July

19 Spatial Augmented Reality
Monday, Tutorial, 3:45 - 5:30 pm
LEVEL: INTERMEDIATE
A survey of the latest techniques for augmented reality, which go beyond conventional head-mounted displays. The tutorial introduces prototypes, explains rendering and calibration algorithms, discusses case studies, and presents practical experience. Attendees learn about new applications enabled by current augmented-reality techniques that combine the real and virtual worlds in art, science, education, and industry.

Co-Organizers
Oliver Bimber
Bauhaus-Universität Weimar
Ramesh Raskar
Mitsubishi Electric Research Laboratories (MERL)

20 QTKit: A Modern Framework for Multimedia Applications
Monday, Tutorial, 3:45 - 5:30 pm
LEVEL: BEGINNING
An in-depth look at QTKit, one of Apple’s newest media technologies, presented by its chief architect and one of its key third-party adopters. Attendees learn how to harness the power and flexibility of QuickTime from their Cocoa applications.

Organizer
Tim Monroe
Apple Computer, Inc.

21 Taxonomy of Digital Creatures: Defining Character Development Techniques Based Upon Scope of Use
Monday, Tutorial, 3:45 - 5:30 pm
LEVEL: BEGINNING
Using computer graphics to develop digital creatures from concept to realization requires a series of decisions based on how the character is expected to be seen. This course focuses on how to use a creature’s scope of appearance to effectively define the best use of modeling, rigging, look development, and animation techniques.

Organizer
Tim McLaughlin
Industrial Light & Magic

Monday, 31 July

22 Résumés and Demo Reels: If Yours Aren’t Working, Neither Are You!
Monday, Tutorial, 3:45 - 5:30 pm
LEVEL: BEGINNING
Learn what it takes to get a job in the computer graphics field. A top career coach and recruiter reveals the secrets of how to create an irresistible résumé and showcase your talent in a demo reel to get the job you want. Sample résumés and demo reels are included.

Organizer
Pamela Kleibrink Thompson
Ideas to Go

Tuesday, 1 August

23 The Web as a Procedural Sketchbook
Monday, Tutorial, 3:45 - 5:30 pm
LEVEL: INTERMEDIATE
Ideas that effectively integrate new technology with new visual design can be quickly developed and published on the web, using only Java applets. With a selection of applets as illustrative examples, this course teaches, step by step, how to rapidly develop and publish visual and procedural ideas (animation, modeling, design, gameplay paradigms, etc.) on the web. The course provides source code for an extensive set of libraries that enable rapid development of such applets.

Organizer
Ken Perlin
New York University, Media Research Lab

24 Exploiting Perception in High-Fidelity Virtual Environments
Tuesday, Full-Day, 8:30 am - 5:30 pm
LEVEL: INTERMEDIATE
This course introduces high-fidelity virtual environments and explains the key components required to build compelling environments. Then it details perceptually inspired techniques that facilitate high-fidelity rendering, collaboration, and complex interaction in these virtual environments. Particular emphasis is placed on real applications, with several live demonstrations.

Organizer
Mashhuda Glencross
The University of Manchester
Tuesday, 1 August

25

Recreational Computer Graphics
Tuesday, Half-Day, 8:30 am - 12:15 pm
LEVEL: BEGINNING

With computer graphics, we can expand our imaginations, explore the natural world, and create stunning shapes, images, textures, and patterns. This course looks at a variety of different topics that show how graphics can help us enjoy the wonder and beauty of the world we live in.

Organizer and Lecturer
Andrew Glassner
Coyote Wind Studios

26

Advanced Real-Time Rendering in 3D Graphics and Games
Tuesday, Full-Day, 8:30 am - 5:30 pm
LEVEL: INTERMEDIATE

The amazing power of the latest GPUs has spurred a real osmosis of ideas between the game developers and state-of-the-art graphics research. This course presents innovative real-time algorithms from award-winning game engines and ground-breaking 3D rendering that are pushing the visual boundaries and interactive experience of complex virtual worlds. The techniques are applicable in real-time and offline domains. Attendees will learn several innovative highly optimized algorithms in various areas of real-time rendering.

Organizer
Natalya Tatarchuk
ATI Research, Inc.

27

The Art of Story Telling
Tuesday, Full-Day, 8:30 am - 5:30 pm
LEVEL: BEGINNING

Four of Hollywood’s screenwriter gurus teach story structure, how to create believable characters, and the techniques that make stories connect with an audience on an emotional level.

Organizer
Ted Burge
Walt Disney Feature Animation

Tuesday, 1 August

28

Geometric Modeling Based on Triangle Meshes
Wednesday, Full-Day, 8:30 am - 5:30 pm
LEVEL: INTERMEDIATE

This course is designed to cover the entire geometry processing pipeline based on triangle meshes. Speakers present the latest concepts for mesh generation and mesh repair; geometry and topology optimizations like mesh smoothing, decimation, and remeshing; and parametrization, segmentation, and shape editing. In addition to describing and discussing the related algorithms, the course provides valuable implementation hints and source code for most of the covered topics.

Co-Organizers
Mario Botsch
Mark Pauly
Eidgenössische Technische Hochschule Zürich

29

Performance-Driven Facial Animation
Wednesday, Full-Day, 8:30 am - 5:30 pm
LEVEL: INTERMEDIATE

Performance-driven facial animation (PDFA) has recently been adopted in a number of important entertainment projects. This course describes tracking, cross mapping, and model derivation technologies used in PDFA, and summarizes unresolved issues. Leading researchers and industry specialists present current and forthcoming motion-capture techniques, cross-mapping technologies, and application case studies from important recent and current projects.

Organizer
Fred Pighin
Industrial Light & Magic
Papers

interdisciplinary research achievements in the world’s most prestigious presentation of current work in computer graphics and interactive techniques. Academic and industry investigators explain their ground-breaking, provocative, and important new work. After their talks, most authors are available for informal discussion of their research and its implications.

For detailed information on all SIGGRAPH 2006 Papers, visit: www.siggraph.org/s2006

Full Conference registration allows attendees access to all SIGGRAPH 2006 Papers. Seating is on a first-come, first-served basis. Please be sure to arrive early for the Papers sessions you wish to attend.

Special Event
Fast-Forward Papers Preview
Sunday, 30 July, 6 – 8 pm

Snapshot overviews of the paper sessions, in which authors give short summaries of their work. It’s a fast, fun, and provocative preview of the latest and most significant findings in computer graphics and interactive techniques.
Monday, 31 July

8:30 – 10:15 am

**Sampling and Ray Tracing**

Session Chair: Kavita Bala, Cornell University

*Ray Tracing Animated Scenes Using Coherent Grid Traversal*
Ingo Wald
Thiago Ize
Andrew Kensler
Aaron Knoll
Steven G. Parker
Scientific Computing and Imaging Institute
University of Utah

*Guided Visibility Sampling*
Peter Wonka
Arizona State University

Michael Wimmer
Technische Universität Wien

Kaichi Zhou
Arizona State University

Stefan Maierhofer
Gerd Hesina
Zentrum für Virtual Reality und Visualisierung

Alexander Reshetov
Intel Corporation

*A Spatial Data Structure for Fast Poisson-Disk Generation*
Daniel Dunbar
Greg Humphreys
University of Virginia

*Recursive Wang Tiles for Real-Time Blue Noise*
Johannes Kopf
Universität Konstanz

Daniel Cohen-Or
Tel Aviv University

Oliver Deussen
Universität Konstanz

Dani Lischinski
The Hebrew University of Jerusalem

8:30 – 10:15 am

**Image Processing**

Session Chair: Yizhou Yu, University of Illinois at Urbana-Champaign

*Fast Median and Bilateral Filtering*
Ben Weiss
Shell & Slate Software

*Hybrid images*
Aude Oliva
Massachusetts Institute of Technology, Department of Brain and Cognitive Sciences

Antonio Torralba
Massachusetts Institute of Technology, Computer Science and Artificial Intelligence Laboratory

Philippe G. Schyns
University of Glasgow

*Image Deformation Using Moving Least Squares*
Scott Schaefer
Travis McPhail
Joe Warren
Rice University

*Appearance-Space Texture Synthesis*
Sylvain Lefebvre
Hugues Hoppe
Microsoft Research

10:30 am – 12:15 pm

**Shape Matching and Symmetry**

Session Chair: Ioana Boier-Martin, IBM T.J. Watson Research Center

*A Planar Reflective Symmetry Transform for 3D Shapes*
Joshua Podolak
Philip Shilane
Aleksey Golovinskiy
Szymon Rusinkiewicz
Thomas A. Funkhouser
Princeton University

*Partial and Approximate Symmetry Detection for 3D Geometry*
Niloy J. Mitra
Leonidas J. Guibas
Stanford University

Mark Pauly
Eidgenössische Technische Hochschule Zürich

*Reassembling Fractured Objects by Geometric Matching*
Qi-Xing Huang
Tsinghua University

Simon Floery
Technische Universität Wien

Natasha Gelfand
Stanford University

Michael Hofer
Helmut Pottmann
Technische Universität Wien

*Perfect Spatial Hashing*
Sylvain Lefebvre
Hugues Hoppe
Microsoft Research
Monday, 31 July

10:30 am – 12:15 pm
Shape Modeling and Textures

Session Chair: David Ebert, Purdue University

SmoothSketch: 3D Free-Form Shapes From Complex Sketches
Olga Karpenko
John F. Hughes
Brown University

Image-Based Plant Modeling
Long Quan
Ping Tan
Gang Zeng
Lu Yuan
Jingdong Wang
The Hong Kong University of Science and Technology

Sing Bing Kang
Microsoft Research

Interactive Decal Compositing With Discrete Exponential Maps
Ryan Schmidt
University of Calgary

Cindy Grimm
Washington University in St. Louis

Brian Wyvill
University of Calgary

Procedural Modeling of Buildings
Pascal Mueller
Eidgenössische Technische Hochschule Zürich

Peter Wonka
Arizona State University

Simon Haegler
Andreas Ulmer
Luc Van Gool
Eidgenössische Technische Hochschule Zürich

3:45 – 6 pm
Image Manipulation

Session Chair: Alexei Efros, Carnegie Mellon University

Color Harmonization
Daniel Cohen-Or
Olga Sorkine
Ran Gal
Tommer Leyvand
Tel Aviv University

Ying-Qing Xu
Microsoft Research Asia

Drag-and-Drop Pasting
Jiaya Jia
Chinese University of Hong Kong

Jian Sun
Microsoft Research Asia

Ruonan Pu
Chi-Keung Tang
Hong Kong University of Science and Technology

Heung-Yeung Shum
Microsoft Research Asia

Two-Scale Tone Management for Photographic Look
Soonmin Bae
Sylvain Paris
Frédo Durand
Massachusetts Institute of Technology, Computer Science and Artificial Intelligence Laboratory

Interactive Local Adjustment of Tonal Values
Dani Lischinski
Zeev Farbman
The Hebrew University

Matt Uyttendaele
Rick Szeliski
Microsoft Research

Image-Based Material Editing
Erum Arif Khan
University of Central Florida

Erik Reinhard
University of Bristol

Roland Fleming
Heinrich Buelthoff
Max-Planck-Institute für biologische Kybernetic

Tuesday, 1 August

8:30 – 10:15 am
Surfaces

Session Chair: Leif P. Kobbelt, RWTH Aachen University

Real-Time GPU Rendering of Piecewise Algebraic Surfaces
Charles Loop
Jim Blinn
Microsoft Research

Point-Sampled Cell Complexes
Anders Adamson
Technische Universität Darmstadt

Marc Alexa
Technische Universität Berlin

Geometric Modeling With Conical Meshes and Developable Surfaces
Yang Liu
University of Hong Kong

Helmut Pottmann
Johannes Wallner
Technische Universität Wien

Welming Wang
University of Hong Kong

Yong-Liang Yang
Tsinghua University

Mesh Quilting for Geometric Texture Synthesis
Kun Zhou
Xin Huang
Xi Wang
Microsoft Research Asia

Yi-Ying Tong
Mathieu Desbrun
California Institute of Technology

Baining Guo
Heung-Yeung Shum
Microsoft Research Asia
Tuesday, 1 August

10:30 am – 12:15 pm
HDR and Systems

Session Chair: Greg Ward, BrightSide Technologies

High-Dynamic-Range Texture Compression for Graphics Hardware
Jacob Munkberg
Petrik Clarberg
Jon Hasselgren
Tomas Akenine-Möller
Lunds universitet

High-Dynamic-Range Texture Compression
Kimmo Roimela
Tomi Aarnio
Joonas Itäranta
Nokia Research Center

Backward Compatible High Dynamic Range MPEG Video Compression
Rafal Mantiuk
Alexander Efremov
Karol Myszkowski
Hans-Peter Seidel
Max-Planck-Institut für Informatik

The Direct3D 10 System
David Blythe
Microsoft Corporation

1:45 – 3:30 pm
Appearance Representation

Session Chair: Holly Rushmeier, Yale University

Inverse Shade Trees for Non-Parametric Material Representation and Editing
Jason Lawrence
Princeton University

Aner Ben-Artzi
Columbia University

Christopher DeCoro
Princeton University

Wojciech Matusik
Mitsubishi Electric Research Laboratories (MERL)

Ravi Ramamoorthi
Columbia University

Szymon Rusinkiewicz
Princeton University

A Compact Factored Representation of Heterogeneous Subsurface Scattering
Pieter Peers
Karl vom Berge
Katholieke Universiteit Leuven

Wojciech Matusik
Mitsubishi Electric Research Laboratories (MERL)

Ravi Ramamoorthi
Columbia University

Jason Lawrence
Szymon Rusinkiewicz
Princeton University

Philip Dutré
Katholieke Universiteit Leuven

Appearance Mainfolds for Modeling Time-Variant Appearance of Materials
Jiaping Wang
Institute of Computing Technology, Chinese Academy of Sciences

Xin Tong
Steve Lin
Microsoft Research Asia

Minghao Pan
Zhejiang University

Chao Wang
Tsinghua University

Hujon Bao
Zhejiang University

Baining Guo
Heung-Yeung Shum
Microsoft Research Asia

Time-Varying Surface Appearance: Acquisition, Modeling, and Rendering
Jinwei Gu
Columbia University

Chien-i Tu
Mitsubishi Electric Research Laboratories (MERL)

Ravi Ramamoorthi
Peter Belhumeur
Columbia University

Wojciech Matusik
Mitsubishi Electric Research Laboratories (MERL)

Shree K. Nayar
Columbia University
Tuesday, 1 August

3:45 – 5:30 pm
Matting & Deblurring

Session Chair: Paul Debevec,
USC Centers for Creative Technologies

Flash Matting
Jian Sun
Microsoft Research Asia

Yin Li
Microsoft Research

Sing Bing Kang
Microsoft Research

Heung-Yeung Shum
Microsoft Research Asia

Natural Video Matting Using Camera Arrays
Neel Joshi
University of California, San Diego

Wojciech Matusik
Shai Avidan
Mitsubishi Electric Research Laboratories (MERL)

Removing Camera Shake From a Single Photograph
Rob Fergus
Barun Singh
Massachusetts Institute of Technology, Computer Science and Artificial Intelligence Laboratory

Aaron Hertzmann
Sam Roweis
University of Toronto

William Freeman
Massachusetts Institute of Technology, Computer Science and Artificial Intelligence Laboratory

Coded Exposure Photography: Motion Deblurring Using Fluttered Shutter
Ramesh Raskar
Amit Agrawal
Mitsubishi Electric Research Laboratories (MERL)

Jack Tumblin
Northwestern University

Wednesday, 2 August

8:30 – 10:15 am
Fluids

Session Chair: Ming Lin, University of North Carolina at Chapel Hill

Efficient Simulation of Large Bodies of Water by Coupling Two and Three Dimensional Techniques
Geoffrey Irving
Stanford University and Pixar Animation Studios

Eran Guendelman
Stanford University

Frank Losasso
Ronald Fedkiw
Stanford University and Industrial Light & Magic

Multiple Interacting Liquids
Frank Losasso
Stanford University and Industrial Light & Magic

Tamar Shinar
Stanford University

Andrew Selle
Stanford University and Intel Corporation

Ronald Fedkiw
Stanford University and Industrial Light & Magic

Fluid Animation With Dynamic Meshes
Bryan M. Klingner
Bryan E. Feldman
Nuttapong Chentanez
James F. O’Brien
University of California, Berkeley

Model Reduction for Real-Time Fluids
Adrien Treuille
Andrew Lewis
Zoran Popović
University of Washington and Electronic Arts

8:30 – 10:15 am
Image Collections

Session Chair: Wojciech Matusik,
Mitsubishi Electric Research Laboratories (MERL)

Photo Tourism: Exploring Photo Collections in 3D
Noah Snavely
Steven M. Seitz
University of Washington

Richard Szeliski
Microsoft Research

AutoCollage
Carsten Rother
Lucas Bordeau
Youssef Hamadi
Andrew Blake
Microsoft Research Cambridge

Photographing Long Scenes With Multi-Viewpoint Panoramas
Aseem Agarwala
University of Washington

Maneesh Agrawala
University of California, Berkeley

Michael F. Cohen
Richard Szeliski
Microsoft Research

David Salesin
University of Washington and Adobe Systems Incorporated

Schematic Storyboarding for Video Visualization and Editing
Dan B. Goldman
Brian Curless
University of Washington

David Salesin
University of Washington and Adobe Systems Incorporated

Steven M. Seitz
University of Washington
Wednesday, 2 August

10:30 am – 12:15 pm
Motion Capture

Session Chair: Doug L. James, Carnegie Mellon University

Interaction Capture and Synthesis
Paul G. Kry
The University of British Columbia and EVASION/INRIA

Dinesh K. Pai
Rutgers University and The University of British Columbia

Capturing and Animating Skin Deformation in Human Motion
Sang Il Park
Jessica K. Hodgins
Carnegie Mellon University

Compressing Motion Capture Databases
Okan Arikan
University of Texas at Austin

Motion Patches: Building Blocks for Virtual Environments Annotated With Motion Data
Kang Hoon Lee
Myeong Geol Choi
Jehee Lee
Seoul National University

10:30 am – 12:15 pm
Image Capture

Session Chair: Szymon Rusinkiewicz, Princeton University

Projection Defocus Analysis for Scene Capture and Image Display
Li Zhang
Shree K. Nayar
Columbia University

Multiview Radial Catadioptric Imaging for Scene Capture
Sujit Kuthirummal
Shree K. Nayar
Columbia University

Light Field Microscopy
Marc Levoy
Ren Ng
Andrew Adams
Matthew Footer
Mark Horowitz
Stanford University

Fast Separation of Direct and Global Components of a Scene Using High Frequency Illumination
Shree K. Nayar
Gurunandan Krishnan
Columbia University

Michael D. Grossberg
City University of New York

Ramesh Raskar
Mitsubishi Electric Research Laboratories (MERL)

3:45 – 6 pm
Precomputed Transfer

Session Chair: Fabio Pellacini, Dartmouth College

Real-Time BRDF Editing in Complex Lighting
Aner Ben-Artzi
Ryan Overbeck
Ravi Ramamoorthi
Columbia University

Generalized Wavelet Product Integral for Rendering Dynamic Glossy Objects
Weifeng Sun
Amar Mukherjee
University of Central Florida

All-Frequency Precomputed Radiance Transfer Using Spherical Radial Basis Functions and Clustered Tensor Approximation
Yu-Ting Tsai
Zen-Chung Shih
National Chiao Tung University

Real-Time Soft Shadows in Dynamic Scenes Using Spherical Harmonic Exponentiation
Zhong Ren
Rui Wang
Zhejiang University

John Snyder
Microsoft Research

Kun Zhou
Xinguo Liu
Microsoft Research Asia

Bo Sun
Columbia University

Peter-Pike Sloan
Microsoft Corporation

Hujun Bao
Qunsheng Peng
Zhejiang University

Baining Guo
Microsoft Research Asia

Precomputed Acoustic Transfer: Output-Sensitive, Accurate Sound Generation for Geometrically Complex Vibration Sources
Doug L. James
Jernej Barbic
Carnegie Mellon University

Dinesh K. Pai
Rutgers University and The University of British Columbia
Thursday, 3 August

8:30 – 10:15 am
Appearance Modeling

Session Chair: Philip Dutré, Katholieke Universiteit Leuven

Photorealistic Rendering of Rain Streaks
Kshitiz Garg
Shree K. Nayar
Columbia University

Acquiring Scattering Properties of Participating Media by Dilution
Srinivasa Narasimhan
Mohit Gupta
Carnegie Mellon University

Craig Donner
University of California, San Diego

Ravi Ramamoorthi
Shree K. Nayar
Columbia University

Henrik Wann Jensen
University of California, San Diego

Analysis of Human Faces Using a Measurement-Based Skin Reflectance Model
Tim Weyrich
Eidgenössische Technische Hochschule Zürich

Wojciech Matusik
Hanspeter Pfister
Mitsubishi Electric Research Laboratories (MERL)

Bernd Bickel
Eidgenössische Technische Hochschule Zürich

Craig Donner
University of California, San Diego

Chien Tu
Janet McAndless
Mitsubishi Electric Research Laboratories (MERL)

Jinho Lee
Atlantis Corp.

Addy Ngan
Massachusetts Institute of Technology

Henrik Wann Jensen
University of California, San Diego

Markus Gross
Eidgenössische Technische Hochschule Zürich

A Statistical Model for Synthesis of Detailed Facial Geometry
Aleksey Golovinskiy
Princeton University

Wojciech Matusik
Hanspeter Pfister
Mitsubishi Electric Research Laboratories (MERL)

Szymon Rusinkiewicz
Thomas A. Funkhouser
Princeton University

8:30 – 10:15 am
Meshes

Session Chair: Joe Warren, Rice University

Modified Subdivision Surfaces With Continuous Curvature
Adi Levin
Cadent Ltd.

Edge Subdivision Schemes and the Construction of Smooth Vector Fields
Ke Wang
Weiwei Yi
Yiying Tong
Mathieu Desbrun
Peter Schröder
California Institute of Technology

Streaming Computation of Delaunay Triangulations
Martin Isenburg
University of California, Berkeley

Yuanxin Liu
University of North Carolina at Chapel Hill

Jonathan Shewchuk
University of California, Berkeley

Jack Snoeyink
University of North Carolina at Chapel Hill

Spectral Surface Quadrangulation
Shen Dong
Peer-Timo Bremer
Michael Garland
University of Illinois, Urbana-Champaign

Valerio Pascucci
Lawrence Livermore National Laboratory

John C. Hart
University of Illinois, Urbana-Champaign
10:30 am – 12:15 pm
Light Transport
Session Chair: Ravi Ramamoorthi, Columbia University

Simulating Multiple Scattering in Hair Using a Photon-Mapping Approach
Jonathan T. Moon
Stephen R. Marschner
Cornell University

Statistical Acceleration for Animated Global Illumination
Mark Meyer
John Anderson
Pixar Animation Studios

Multidimensional Lightcuts
Bruce Walter
Adam Arbree
Kavita Bala
Donald Greenberg
Cornell University

Direct-to-Indirect Transfer for Cinematic Relighting
Milos Hasan
Cornell University
Fabio Pellacini
Dartmouth College
Kavita Bala
Cornell University

10:30 am – 12:15 pm
Shape Deformation
Session Chair: Marc Alexa, Technische Universität Berlin

Editing Arbitrarily Deforming Surface Animations
Scott Kircher
Michael Garland
University of Illinois at Urbana-Champaign

A Fast Multigrid Algorithm for Mesh Deformation
Lin Shi
Yizhou Yu
Nathan Bell
Wei-Wen Feng
University of Illinois at Urbana-Champaign

Vector-Field-Based Shape Deformations
Wolfram von Funck
Holger Theisel
Hans-Peter Seidel
Max-Planck-Institut für Informatik

Gradient Domain Mesh Deformation
Jin Huang
Xiaohan Shi
Zhejiang University
Xinguo Liu
Kun Zhou
Li-Yi Wei
Microsoft Research Asia
Shanghua Teng
Boston University
Hujun Bao
Zhejiang University
Baining Guo
Heung-Yeung Shum
Microsoft Research Asia

1:45 – 3:30 pm
Numerical and Geometric Algorithms and Crowds
Session Chair: John Snyder, Microsoft Research

Locally Adapted Hierarchical Basis Preconditioning
Richard Szeliski
Microsoft Research

Fast Proximity Computation Among Deformable Models Using Discrete Voronoi Diagrams
Avneesh Sud
Naga Govindaraju
Russell Gayle
Ilknur Kabul
Dinesh Manocha
University of North Carolina at Chapel Hill

Resolving Surface Collisions Through Intersection Contour Minimization
Pascal Volino
Nadia Magnenat-Thalmann
L’Université de Genéve

Continuum Crowds
Adrien Treuille
Seth Cooper
Zoran Popović
University of Washington and Electronic Arts
Thursday, 3 August

1:45 – 3:30 pm  
**Animation**

Session Chair: Dinesh K. Pai, Rutgers University and The University of British Columbia

**The Cartoon Animation Filter**  
Jue Wang  
University of Washington

Maneesh Agrawala  
University of California, Berkeley

Steven Drucker  
Michael F. Cohen  
Microsoft Research

**Inverse Kinematics for Reduced Deformable Models**  
Kevin G. Der  
Massachusetts Institute of Technology

Robert W. Sumner  
Eidgenössische Technische Hochschule Zürich

Jovan Popović  
Massachusetts Institute of Technology

**Super-Helices for Predicting the Dynamics of Natural Hair**  
Florence Bertails  
EVASION/INRIA

Basile Audoly  
Audoly Consulting  
LMM/NRS et Université Pierre et Marie

Marie-Paule Cani  
EVASION / INRIA

Bernard Querleux  
Frédéric Leroy  
L’Oréal Recherche, Aulnay-Sous-Bois

Jean-Luc Lévêque  
L’Oréal Recherche, Clichy

**Heads Up! Biomechanical Modeling and Neuromuscular Control of the Neck**  
Sung-Hee Lee  
Demetri Terzopoulos  
University of California, Los Angeles

3:45 – 5:30 pm  
**Non-Photorealistic Rendering**

Session Chair: Aaron Hertzmann, University of Toronto

**Exaggerated Shading for Depicting Shape and Detail**  
Szymon Rusinkiewicz  
Michael Burns  
Princeton University

Doug DeCarlo  
Rutgers University

**Image Enhancement by Unsharp Masking the Depth Buffer**  
Thomas Luft  
Carsten Colditz  
Oliver Deussen  
Universität Konstanz

**Manga Colorization**  
Yingge Qu  
Tien-Tsin Wong  
Pheng-Ann Heng  
The Chinese University of Hong Kong

**Real-Time Video Abstraction**  
Holger Winnemöller  
Sven Olsen  
Bruce Gooch  
Northwestern University
Panels

interrogate the experts and disagree with their detractors. Panelists present brief statements about the issues that energize the computer graphics community, debate the topics, and answer questions from the audience.

For detailed information on all SIGGRAPH 2006 Panels, visit: www.siggraph.org/s2006

Full Conference and Conference Select registration allows attendees access to all SIGGRAPH 2006 Panels. Seating in Panels is on a first-come, first-served basis. Please be sure to arrive early for the Panels you wish to attend.
Digital Rights, Digital Restrictions
3:45 – 5:30 pm

The internet, with its widening bandwidth and accelerating speed, allows people throughout the world to exchange immense amounts of digital information. Not only can people share their home movies. They can also share movies that they didn’t make and didn’t even pay for. Music companies and movie studios have tried to clamp down on piracy with laws like the Digital Millennium Copyright Act (DMCA) and lawsuits against people they believe are stealing their products.

When DJ Danger Mouse released “The Grey Album” (a remix of Jay-Z’s “The Black Album” and The Beatles’ “The White Album”) on the web, sites that distributed the music received a cease-and-desist notice from EMI. Then Sony joined in with Digital Millennium Copyright Act (DMCA) takedown notices. Is this sort of mashup legal? Should it be? Is the DMCA the correct way to protect art? Is restricting the creativity of artists justified when the art of others is involved?

Hardware and software manufacturers, working with movie studios, record studios, and other content providers, are releasing systems with Digital Rights Management (DRM). These products limit how and when content (text, audio, and video) can be viewed and copied. Is DRM a reasonable response to corporate concerns about piracy and mashing? Is restricting the customer’s ability to play a movie using a non-DRM player, television, or stereo a fair move to prevent theft? Will everyone be forced to upgrade to see next year’s movies?

Some companies are trying a more active approach: Sony recently added copy-protection software on some of their audio CDs. This “rootkit” software installs itself without telling the user, hides its own contents, and examines what other programs are running on the computer. Is unannounced software installation reasonable? If the software is sending information across the internet to another party, is that reasonable? Where is the line drawn, and who gets to draw it?

Panelists
Robert Ryang
P.S. 260
Karen Sandler
Software Freedom Law Center
Mitch Singer
Sony Pictures Entertainment
Emru Townsend
FPS Magazine

Is a Career in Computer Graphics Possible?
10:30 am – 12:15 pm

Part 1: Skills and Training
How can anyone keep up with the rapid advances in our field? Employees that want to stay current with new technologies and techniques must find a balance with their daily work schedule. If you can’t keep up, will you be able to stay employed?

Are schools able to represent the environment students will eventually find in the field? What skill sets are most valuable? Is it better to be a generalist or a specialist? How much should new employees be expected to know, and how much should they expect to be trained on the job?

Is it worth it for employers to help keep their employees trained, or are they better off just hiring people who are on the cutting edge? Are training departments able to keep up with the demands of employees who are on shortened schedules?

Is becoming obsolete inevitable? Or are there strategies for staying current?

Panelists
Chryssa Cooke
Ex’pression College for Digital Arts
Greg Maloney
Industrial Light & Magic
Ken Maruyama
Sony Pictures Imageworks
So You Want to Create Content: Licenses, Copyrights, and Other Things to Think About
1:45 – 3:30 pm

Licensing in the digital world once meant deciding between open and proprietary licenses. Later, producing free content meant deciding between “free as in beer” and “free as in speech.” Today, there is a vast array of licensing and copyright schemes, each with a different view of what’s protected and what’s not. Why do we need so many schemes? Are they really useful? Do you understand the difference between copyleft and Creative Commons?

More schemes are coming, most notably the new GPL version 3. Why create a new licensing scheme? What’s left out of today’s schemes that tomorrow’s will cover? As software developers and content creators, should we “share the wealth” or “protect our wealth?”

Panelists
Andy Luckey
Greater Family, LLC
Gary Morris
Kenyon & Kenyon, LLP
Gregory Silberman
Kay Scholer, LLP

Ethics in Image Manipulation
3:45 – 5:30 pm

For a very small investment, anyone can access the tools required to make significant yet undetectable changes to photographs and other images. The SIGGRAPH community can take much of the credit for this amazing progress. Should we also take the responsibility? Should SIGGRAPH get more involved in public policy?

Some recent examples of significant unethical applications:

• During the OJ Simpson investigation, both Time and Newsweek ran Simpson’s mug shot on their covers, on the same week. But Time doctored the photo to make Mr. Simpson look darker, blurrier, and more sinister.
• In 2004, the Bush presidential campaign admitted that it digitally duplicated soldiers to change the appearance of a campaign-event photo.
• During the 2000 New Year’s Eve celebration, CBS digitally replaced the NBC logo on the Times Square Jumbotron with their own logo.

Image manipulation is essential in the visual effects industry, but it is discouraged in research and journalism. And there are many gray areas. When is image manipulation appropriate? How should the SIGGRAPH community respond to unethical applications of what we have created? Where do we draw the line, and should we draw it? How do we teach these ethics to our students?

Panelists
Kathryn Carlson
Fluid Effect
Brian DeLevie
University of Colorado at Denver
Aude Oliva
Massachusetts Institute of Technology
Wednesday, 2 August

Video Games: Content and Responsibility
10:30 am – 12:15 pm

Since their invention, video games have been accused of many things, including:

- Male-focused stories and design
- Excessive violence
- Promoting addiction to digital entertainment
- Distorting attention spans

Of course, the same complaints have been made about radio, television, the internet, and computers in general. Are all or any of these concerns valid?

When will someone write games that girls want to play, or has it already been done? Do fun and educational video games exist? Do video games train people to be violent, or do they provide a safe way to vent violent tendencies? Does the ESRB rating system go too far, or not far enough? Are game developers and publishers taking enough responsibility for their creations? Are consumers using their products responsibly?

Panelists
Jonathan Cho Yan Chan
University of Hong Kong

Jason Della Rocca
International Game Developers Association

Tamsen Mitchell
Shaba Games, Inc.

David Walsh
National Institute for Media and the Family

Is a Career in Computer Graphics Possible?
3:45 – 5:30 pm

Part 2: Dedication and Expectation
Is our work environment becoming as ephemeral as our work? Companies are demanding more of our time, making permanent crunch time a possible future. Can companies stay profitable while avoiding massive overtime, or are class action lawsuits by employees going to proliferate?

Or is that impossible? Should we just learn to live with serious stress and eventual burnout?

How have employers and employees who’ve been in this business for many years survived?

What can all of us (companies, employers, researchers, developers, artists, students) do to make sure that sane and stable jobs exist for us in computer graphics?

Panelists
Jenny Fulle
Sony Pictures Imageworks

Kevin Koch
The Animation Guild, IATSE Local 839

Henry LaBounta
Electronic Arts
Committees

ACM SIGGRAPH is a diverse group of researchers, artists, developers, filmmakers, scientists, and other professionals, who share an interest in computer graphics and interactive techniques. The community values excellence, passion, integrity, volunteerism, and cross-disciplinary interaction. ACM SIGGRAPH sponsors not only the annual SIGGRAPH conference, but also focused symposia, chapters in cities throughout the world, awards, grants, educational resources, online resources, a public policy program, a traveling art show, and the SIGGRAPH Video Review. For additional information about ACM SIGGRAPH: www.siggraph.org

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Purdue University

ACM SIGGRAPH Conference Chief Staff Executive
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SIGGRAPH 2006 Conference Manager
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Kirsten Cater
University of Bristol

Outreach
Scott Lang
Bergen County Academies

Lynn Pocock
New York Institute of Technology

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David (grue) Debry
Thrown Clear Productions

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Julie Dorsey
Yale University

Publications
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Registration
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SIGGRAPH 2009 Conference Chair
Ronen Barzel

Sketches
Hanspeter Pfister
Mitsubishi Electric Research Laboratories (MERL)

Special Sessions
Josh Strickon
The New York Times Company

Student Volunteers
Jaime Radwan

Teapot Exhibit
Marc Barr
Middle Tennessee State University

Travel Agent
Travel Technology Group

XSV: Ex-Student Volunteer Mentoring Program
Jacquelyn Martino
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ACM SIGGRAPH Membership
ACM SIGGRAPH is the world’s premier association for generation and distribution of information on computer graphics and interactive techniques. Membership in this professional organization offers a networking bonanza and boundless opportunities for learning about and contributing to the business, technology, and future of the industry. Become a member of ACM SIGGRAPH and share in the excellence, passion, integrity, volunteerism, and cross-disciplinary interaction that we proudly represent. For more details on membership or to join online, visit www.siggraph.org and select Membership.

Internet Access
Free wireless access will be available for SIGGRAPH 2006 throughout the Boston Conference & Exhibition Center (BCEC). SIGGRAPH 2006 will not be providing public workstations for internet access, however, there will be limited internet access in the FedEx Kinkos located in the BCEC.

Airport Shuttle Transportation
The following companies offer shuttle-bus service from Logan International Airport to downtown Boston hotels. Please contact each company directly for pricing and pickup/drop off information, and to make advance reservations.

JC Transportation/Ace American
+1.781.598.3433
800.517.2281

City Transportation
+1.617.561.9000

Star Shuttle, Inc.
+1.617.230.6005

Bookstore
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 2006 speakers and award winners. To suggest books, CDs, or DVDs that should be available in the bookstore, contact:

BreakPoint Books
800.968.9622
+1.440.236.5686 fax
dave@breakpointbooks.com
www.breakpointbooks.com

Child Care
Important Notice: Child Care will not be provided at SIGGRAPH 2006. Contact your hotel concierge for suggestions.

Job Fair
Tuesday – Thursday, 1 – 3 August
10 am – 4 pm

Interview job seekers and companies looking for talented professionals. The SIGGRAPH Conference Job Fair returns in 2006 with extended hours and expanded offerings. New technology, features, and benefits have been added to help active jobseekers or casual networkers connect with employers before, during, and after SIGGRAPH 2006.

Job Seekers and Networkers
• Are you actively looking for a job?
• Are you casually networking to see what opportunities are available?
• Are you interested in getting acquainted with some great companies?
• Or are you hoping to broaden your horizons and possibly switch industries?

Employers
• Will you be looking for “right brain” talent at SIGGRAPH 2006?
• Do you need an efficient and effective way to showcase your company and job openings?
• Do you need access to professionals in multiple industries?

If the answer to any of those questions is “yes,” participation in the SIGGRAPH 2006 JOB FAIR is a must!

The Job Fair is produced by CreativeHeads.net, THE Job Board for professionals in the video game, animation, VFX, TV, film, and software tools and technology industries.

For detailed information about the new and improved SIGGRAPH 2006 Job Fair, booth packages, exhibitor recruitment packages, employer pricing, and registration forms contact:

Ray Schnell
+1.310.607.8075 x281
jobfair@creativeheads.net
Pathfinders
Special assistance for first-time SIGGRAPH conference attendees. Let us help you navigate your way through SIGGRAPH 2006. Feedback always welcome at: pathfinders@siggraph.org

Shipping Desk
The shipping desk, located in the SIGGRAPH 2006 registration area, provides next-day air, second-day air, and regular ground shipping services to destinations throughout the world.

Shuttle Service
SIGGRAPH 2006 provides complimentary shuttle service between most conference hotels and the Boston Convention & Exhibition Center.

NEW THIS YEAR: Shuttle service is available only to attendees who register at official conference hotels through the SIGGRAPH 2006 hotel reservation system. Those attendees will receive special wristbands that allow them to board the shuttle buses. Attendees who are not registered at official conference hotels will be allowed to purchase wristbands in the SIGGRAPH Store located in the Boston Convention & Exhibition Center. Attendees without wristbands will not be allowed to use the shuttle service.

Check the shuttle flyer and signs in the hotel lobbies for exact details.

Special Policies
• Registered attendees under the age of 16 must be accompanied by an adult at all times.
• Children under 16 are not permitted in the Exhibition. Age verification is required.
• SIGGRAPH 2006 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 2006 or ACM SIGGRAPH.
• No cameras or recording devices are permitted at SIGGRAPH 2006. Abuse of this policy will result in the loss of the individual’s registration credentials.

Transportation Options
Taxicabs
Taxicabs are available around the clock from Logan Airport. It takes about 20-25 minutes from Logan Airport to the SIGGRAPH 2006 hotels in the Back Bay area. Fares are approximately $18-$25.

Subway Transportation
Free shuttle bus service runs between airline terminals and the T (subway system). The shuttle operates daily from 5:30 am to 1 am with departures every 8-12 minutes. For more information and a T map, visit: www.siggraph.org/s2006 and select Boston.

Boston Convention & Exhibition Center
415 Summer Street
Boston, Massachusetts 02210 USA

Accessibility
The convention center is handicap accessible. If you have special needs or requirements, please call Conference Management at: +1.312.644.6610.

Business Center
FedEx Kinkos, in the main lobby of the Boston Convention & Exhibition Center, offers the following services: faxing, copying, shipping/receiving, office supplies, internet access, and computer rental.

Food Services
Several restaurants, concessions, and food carts are available throughout the convention center for the convenience of SIGGRAPH 2006 attendees.

Parking
SIGGRAPH 2006 attendees can park at the rear of the Boston Convention and Exhibition Center for $10 per day (self parking) in the South Lot. There is also valet parking for $20 per day in front of the convention center. There are no in/out privileges for self or valet parking.
Hotel Reservations
SIGGRAPH 2006 has negotiated discount rates for hotels in Boston. These discounts are available to SIGGRAPH 2006 attendees only. Please make your hotel reservation by 30 June 2006. Reservations made after 30 June will be based on availability only.

Key Dates to Remember
30 June 2006: After this date, reservations are based on availability.
14 July 2006: Last day for deposits to be refunded.
21 July 2006, 1 pm Central time: You may submit housing requests or change or cancel existing reservations with Travel Technology Group.
24 July 2006: All reservation changes and cancellations are to be made directly with your assigned hotel.

Deposit and Cancellation Policy
A deposit of one night’s room and tax is required for each room. After 14 July, the non-refundable deposit will be charged to the credit card used to guarantee the room reservation(s) by either your confirmed hotel or Travel Technology Group.

The non-refundable deposit does not guarantee your room reservation if you do not check in on your confirmed arrival date.

SIGGRAPH 2006’s deposit policy supersedes any individual hotel’s deposit policy.

Visit the SIGGRAPH 2006 web site www.siggraph.org/s2006 to access the easy to use online hotel reservation system, which includes complete information on housing policies, procedures and rates:

Or contact:
SIGGRAPH 2006 Housing
c/o Travel Technology Group
110 West Hubbard
Chicago, Illinois 60610 USA
800.631.5557 (Continental US and Canada)
+1.312.527.7300
+1.312.329.9513 fax
siggraph2006@ttgonline.com

Air Travel
Travel Technology Group (TTG), the official travel coordinator for SIGGRAPH 2006, provides custom itineraries with the best routing and travel times available.

Fly on the official airline, United Airlines, and save on special discounts unavailable to the general public. United Airlines is offering special meeting fares for SIGGRAPH 2006. Earn a 2 to10% discount off of applicable fares, including First Class. By purchasing your ticket at least 30 days in advance of your scheduled travel, you will receive an additional 5% discount. Mileage Plus members receive full credit for all miles flown to this meeting.

To receive your discounts, call the SIGGRAPH 2006 Travel Desk (Please call today as seats may be limited.):

TTG
800.631.5557 (US and Canada) or
+1.312.527.7300 (International)
siggraph2006@ttgonline.com
7 am to 6 pm, Central time, Monday through Friday

A $30 service fee is charged for each airline ticket issued and purchased by phone. Save $20 when you book online.

Or call United Airlines directly:
800.521.4041 and mention ID# 565HD

Hertz Rental Car
Hertz is the official car rental company for SIGGRAPH 2006.

For reservations call:
SIGGRAPH Travel Desk
800.631.5557 (US and Canada) or
+1.312.527.7300 (International)
Hertz
800.654.2240 (US and Canada)
or +1.405.749.4434

Or, reserve your car online:
www.hertz.com

When you call, mention file number:
CV# 032U0007

Boston

Boston is one of the oldest cities in North America. And one of the newest. For over 400 years, it has been a major international seaport and trading center. But it is also one of the world’s most dynamic centers of 21st-century technology. Its citizens played a major role in American history. And they are constantly creating new cityscapes, intellectual breakthroughs, adventurous art, and new ways to enjoy life.

For complete information on Boston’s tourist attractions, contact:
Greater Boston Convention & Visitors Bureau
Two Copley Place, Suite 105
Boston, Massachusetts 02116-6501 USA
888-SEE BOSTON
http://www.bostonusa.com/
Downtown Boston Accommodations

A 12.45% tax per night is added to all hotel bills in Boston. Room occupancy taxes are subject to change. Early departure fees may apply. Prices are listed per night.

<table>
<thead>
<tr>
<th>Hotels</th>
<th>Single ($)</th>
<th>Double ($)</th>
<th>Closest Subway Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Boston Marriott Copley Place</td>
<td>159</td>
<td>179</td>
<td>Prudential / Back Bay</td>
</tr>
<tr>
<td>2 Boston Park Plaza</td>
<td>141</td>
<td>161</td>
<td>Arlington</td>
</tr>
<tr>
<td>3 Boston University Dormitories</td>
<td>69*</td>
<td></td>
<td>St. Paul / Boston University West</td>
</tr>
<tr>
<td>4 Hilton Boston Back Bay</td>
<td>149</td>
<td>149</td>
<td>Hynes Convention / Prudential (red line)</td>
</tr>
<tr>
<td>5 Hyatt Regency Boston Financial</td>
<td>144</td>
<td>144</td>
<td>Chinatown / Downtown Crossing</td>
</tr>
<tr>
<td>6 Omni Parker House</td>
<td>149</td>
<td>149</td>
<td>Park Street / State Street</td>
</tr>
<tr>
<td>7 Radisson Hotel</td>
<td>139</td>
<td>139</td>
<td>New England Medical Center / Arlington</td>
</tr>
<tr>
<td>8 Seaport Hotel</td>
<td>169</td>
<td>169</td>
<td>World Trade Center</td>
</tr>
<tr>
<td>9 Sheraton Boston</td>
<td>165</td>
<td>185</td>
<td>Hynes Convention / Prudential</td>
</tr>
<tr>
<td>10 Tremont Boston</td>
<td>129</td>
<td>129</td>
<td>New England Medical Center</td>
</tr>
<tr>
<td>11 Westin Boston Waterfront</td>
<td>177</td>
<td>193</td>
<td>World Trade Center</td>
</tr>
<tr>
<td>12 Westin Copley Place</td>
<td>189</td>
<td>189</td>
<td>Copley / Back Bay</td>
</tr>
<tr>
<td>13 Wyndham Boston (soon to be Hilton)</td>
<td>149</td>
<td>169</td>
<td>State Street / Aquarium</td>
</tr>
</tbody>
</table>

*single only, tax included

When traveling to the convention center, stand on the “In Bound” side of the subway platform. When traveling back to the hotel from the convention center, stand on the “Out Bound” side of the subway platform. It costs $1.25* to ride the subway.

*Fare subject to change.
Hotel Form

Attendee Information
Please print legibly.

Last Name  First Name
Organization
Address
City State/Province
Country Postal Code
Telephone (Include all country, area, and city codes.) Fax
Email

Hotel Preference
Travel Tech will do its best to accommodate you on your first hotel request. In the event that your preferred hotels are not available, an alternate hotel will be confirmed based on location and rate preferences.

First Request Hotel Name Third Request Hotel Name
Second Request Hotel Name Fourth Request Hotel Name

Reservation Request
If you are making reservations for more than one room, please supply information on all rooms required.

Guest Room One: O Single* O Double–1 Bed* O Double–2 Beds*
Arrival Date Arrival Time Departure Date Departure Time
Share Room With Special Requirements**

Guest Room Two: O Single* O Double–1 Bed* O Double–2 Beds*
Arrival Date Arrival Time Departure Date Departure Time
Share Room With Special Requirements**

Guest Room Three: O Single* O Double–1 Bed* O Double–2 Beds*
Arrival Date Arrival Time Departure Date Departure Time
Share Room With Special Requirements**

Guest Room Four: O Single* O Double–1 Bed* O Double–2 Beds*
Arrival Date Arrival Time Departure Date Departure Time
Share Room With Special Requirements**

* Note: We will do our best to honor bedding requests based on availability in hotel upon check-in.

Reservation Deposit
Your reservation requires one-night's room and tax deposit via credit card or check submitted with your reservation request. Deposits are non-refundable after Friday, 14 July. SIGGRAPH 2006's deposit policy supersedes any individual hotel's deposit policy.

Credit Card Type Credit Card Holder Name Expiration Date
Credit Card Number Signature

If you wish to provide your guarantee by check, enclose the one-night’s room and tax deposit and make check payable to Travel Tech (address above). Room reservations guaranteed by check will only be accepted through written correspondence.

Acknowledgements, Cancellations, Changes
Travel Tech will acknowledge your hotel reservations by email, fax, or by postal service (if no email or fax number is provided). Your acknowledgement will indicate the name, address, telephone number, deposits charged, and confirmed room rate for your hotel. If you need to make any changes or cancellations to your reservation on or before Friday, 21 July, contact Travel Tech. Beginning Monday, 24 July changes or cancellations must be made directly with your assigned hotel. Room deposits are non-refundable after Friday, 14 July. The non-refundable deposit does not guarantee your reservation if you do not check in on your confirmed arrival date. SIGGRAPH 2006's deposit policy supersedes any individual hotel's deposit policy.

Special Requirements**
It is important that you enjoy SIGGRAPH 2006. If, due to a disability, you have special needs or requirements, please provide us with details in the designated space. Please notify us by 12 July. Travel Tech will make every effort to accommodate your requests.

Travel Technology Group
110 West Hubbard Street
Chicago, Illinois 60610 USA
Attention: SIGGRAPH 2006
800.631.5557 (Continental US and Canada)
+1.312.527.7300 (International)
+1.312.329.9513 fax
siggraph2006@ttgonline.com

Or visit the SIGGRAPH 2006 web site where you can make your hotel reservation through the online housing system. To avoid a duplicate hotel reservation and possible cancellation penalties, do not send more than one hotel request.

RESERVE YOUR HOTEL ACCOMMODATIONS ONLINE!
www.siggraph.org/s2006/housing
Presentations, experiences, services, and documentation included with your SIGGRAPH 2006 registration

**Technical Materials**

Full Conference and Conference Select registrants must pick up conference technical materials included with registration at the SIGGRAPH 2006 Merchandise Pickup Center. Shipping services are available at SIGGRAPH 2006. Unclaimed technical materials will not be shipped after the conference. Most of the technical publications are also available for sale in the SIGGRAPH 2006 Store and Boutique.

*ACM Transactions on Graphics* (Conference Proceedings Special Issue) and Electronic Art & Animation Catalog can be included depending on your level of registration.

**Electronic Art & Animation Catalog – Printed**

Contains the permanent record of images from the Art Gallery: *Intersections* and the Computer Animation Festival. The catalog can be purchased with your registration, or it may be purchased individually at the conference. The content of the printed Electronic Art & Animation Catalog is included on the Conference Select CD-ROM. See Registration Form, page 43, for details.

**Merchandise**

To purchase gifts for family, friends, colleagues, and yourself, order your merchandise in advance through the SIGGRAPH 2006 Registration Form. SIGGRAPH 2006 merchandise is available on a first-come, first-served basis. To see images of these items, visit the SIGGRAPH 2006 web site: www.siggraph.org/s2006

All SIGGRAPH 2006 documentation (see chart at left) including the SIGGRAPH Video Review is available for sale after the conference.

To order, contact:
ACM Order Department
800.342.6626 (Continental US & Canada)
+1.212.626.0500 (International)
+1.212.944.1318 fax
orders@acm.org

**SIGGRAPH Video Review**

SIGGRAPH Video Review is the world’s most widely circulated video-based publication. Over 150 programs, document the annual SIGGRAPH Computer Animation Festival, providing an unequalled opportunity to study state-of-the-art computer graphics techniques, theory and applications. New release and recent issues available in DVD format. Visit the SIGGRAPH Review booth near the SIGGRAPH 2006 Store. For information, contact: svroders@siggraph.org
Complete all information on the registration form noting the following instructions and policies.

Part 1 Attendee Information

Member Rate: If you are currently an ACM or ACM SIGGRAPH member, you are eligible for member discounts. You must provide your current ACM or ACM SIGGRAPH membership number in order to receive the discount, otherwise you will be charged the non-member rate. Local or regional ACM SIGGRAPH Chapters memberships are not eligible for registration discounts.

Students: You must be a full-time student in order to qualify. You must provide your 2006 ACM student membership number to qualify for student rates (this applies for those registering in advance as well as at the conference).

Failure to provide valid information will result in you being charged the non-member rate. For membership and student verification inquiries, please contact the SIGGRAPH 2006 registration center: registration@siggraph.org

Note: Your badge will include your name, organization, city, state, and country as indicated on your registration form.

Part 2 Registration Category

Refer to page 41 for programs, activities, and conference documentation included with each registration category. Register for one category only.

Part 3 Merchandise

All SIGGRAPH 2006 technical materials and merchandise must be picked up at the conference at the Merchandise Pickup Center. No refunds will be given for items that are not claimed at the conference, nor will unclaimed items be shipped after the conference.

Part 4 Electronic Theater Ticket Purchase

One Electronic Theater ticket is included with Full Conference and Conference Select registrations. Registrants in any category can purchase one additional ticket. Please rank your preference, as tickets are issued on a first-come, first-served basis. No refunds. If you do not receive your first ticket choice, a limited number of tickets will be available for exchange at SIGGRAPH 2006 at the Ticket Exchange Counter in the registration area.

Part 5 Credential Mailing

If you would like to receive your badge in advance of the conference via express carrier, the following instructions apply:

- Select and include payment for the appropriate credential mailing option on the registration form.
- Your registration and payment must be received by Friday, 23 June. Your registration must be paid in full.
- You must provide us with a street address as express carriers do not deliver to P.O. boxes.
- If the above instructions are followed, your badge will be mailed two-day service starting mid-July.

Credential Mailing Policies

- All prices are per person.
- SIGGRAPH 2006 is not responsible for lost credentials for which we have a carrier receipt that shows the package was received.
- Should your credentials be lost prior to arriving at the conference or should you forget to bring them, you will need to repay your registration fee and you will NOT receive a refund.

Part 6 Processing Fee

This fee must be paid in full before your registration credentials can be released.

Part 7 Payment Information

- Verify that subtotals add up correctly, and enclose payment.
- Checks and money orders ($US only) should be made payable to SIGGRAPH 2006.
- Credit card payments must include a signature.
- Purchase orders are NOT accepted as payment.
- Forms will not be processed without accompanying payment in full.
- Do not send more than one registration form or it may result in duplicate billing.

Part 8 Special Requirements

SIGGRAPH 2006 wants you to enjoy and experience the conference to its fullest. Some special requirements may take significant time to arrange. To assist SIGGRAPH 2006 in accommodating your needs, please notify us by 12 July. Describe your needs in the space provided below. We will do our best to fulfill requests for special services, but it may not be possible to fulfill all requests, especially after 12 July.

Important Dates

Friday, 23 June

Advance Early Registration Deadline
Registration forms must be received (and full payment included) on or before this date in order to be eligible for advance early registration fees and to receive any mailed credentials.

Wednesday, 12 July

Advance Late Registration Fee Deadline
Registration forms must be received (and full payment included) on or before this date in order to be eligible for advance late registration fees.

Refund Deadline
Cancellation requests for refunds must be made in writing and received on or before Wednesday, 12 July. No refunds will be issued after this date. There is a refund processing fee of $US 75. Exhibits Plus registrations are not refundable.

Substitutions
Substitutions must be made in writing and received before Wednesday, 12 July in order to be processed in advance. Email requests to SIGGRAPH 2006 Registration Management at the address below. In order to request a substitution at SIGGRAPH 2006, you must present, at the special assistance desk, a written request on company letterhead in addition to any previously mailed meeting credentials.

For more information, contact:
SIGGRAPH 2006
877.244.4432
+1.301.694.5124 fax
registration@siggraph.org

For ACM SIGGRAPH Membership Information, contact:
ACM
+1.212.626.0500
+1.212.944.1318 fax
acmhelp@acm.org

Send form to SIGGRAPH 2006 as follows:

Mail form and payment to:
ACM SIGGRAPH 2006
P.O. Box 809130
Chicago, Illinois 60680-9130 USA

or

Fax the registration form to:
+1.301.694.5124

or

Register online: www.siggraph.org/2006

A Note About Faxing: We strongly recommend faxing your form well in advance of the Friday, 23 June deadline. Fax volume increases as the deadline approaches, and SIGGRAPH 2006 is NOT responsible for faxes not received due to busy telephone lines. Keep a copy of your fax transmission report to verify that your fax was transmitted successfully by the deadline in the event of a problem.
# Part 1 Attendee Information

- **Member or Student Member (SM): Membership Number ___________________________**
- **Non-Member (NM)**

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Job Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th>City</th>
<th>State/Province</th>
<th>Country</th>
<th>Postal Code</th>
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<thead>
<tr>
<th>Telephone (Include all country, area, and city codes.)</th>
<th>Fax</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

- **Check if you do not want your contact information made available to exhibitors.**

**Your primary job/business focus:**
- [ ] Animation/Special Effects
- [ ] Digital Video
- [ ] Educators
- [ ] Engineer
- [ ] Game Developer
- [ ] Graphic Arts/Design
- [ ] Researcher/Scientist
- [ ] Software Developer/Programmer
- [ ] Student
- [ ] Web Developer/eCommerce
- [ ] Other: _______________________

**Products and services you use, recommend, specify, or purchase annually:**
- [ ] Animation
- [ ] Business/PC Graphics
- [ ] CAD/CAM/CAE/CIM/Robotics
- [ ] Desktop/Other Publishing
- [ ] Digital Video
- [ ] Fine Arts/Graphics Design
- [ ] Grid Applications
- [ ] Monitors and Displays
- [ ] Multimedia/Hypermedia
- [ ] Scan Converters/Scanners
- [ ] Scientific Visualization
- [ ] Special Graphics Processors
- [ ] Storage Systems
- [ ] Virtual Reality/Simulation
- [ ] Web Graphics/Development
- [ ] Workstations
- [ ] Other: _______________________

**Rate your buying influence:**
- [ ] Final Decision
- [ ] Specify/Recommend
- [ ] No Role
- [ ] Never attended before
- [ ] time
- [ ] 2 times
- [ ] 3 or more times

**Check all that apply:**
- [ ] Monitors and Displays
- [ ] Grid Applications
- [ ] Scientific Visualization
- [ ] Special Graphics Processors
- [ ] Storage Systems
- [ ] Virtual Reality/Simulation
- [ ] Web Graphics/Development
- [ ] Workstations
- [ ] Other: _______________________

# Part 2 Registration Category

**Register for one category only – Full Conference, Conference Select, One Day, or Exhibits Plus:**

To qualify for member pricing you MUST be an ACM or an ACM SIGGRAPH Member prior to registering. CREDITS WILL NOT BE GIVEN IF YOU JOIN AFTERWARDS.

## Full Conference (FC)

**Level FCN:** Includes Full Conference DVD-ROM only. **Level FCP:** Includes Full Conference DVD-ROM and printed ACM Transaction on Graphics (Conference Proceedings Special Issue). **Level FCE:** Includes Full Conference DVD-ROM and printed Electronic Art & Animation Catalog. **Level FCA:** Includes Full Conference DVD-ROM, printed ACM Transaction on Graphics (Conference Proceedings Special Issue), and printed Electronic Art & Animation Catalog.

The content of the printed version of the ACM Transactions on Graphics (Conference Proceedings Special Issue) and Electronic Art & Animation Catalog is included on the Full Conference DVD-ROM.

**Received by 23 June:**
- [ ] Member FCN $750
- [ ] Non-Member FCN $800
- [ ] Student FCN $345
- [ ] Member FCP $775
- [ ] Non-Member FCP $825
- [ ] Student FCP $370
- [ ] Member FCE $800
- [ ] Non-Member FCE $850
- [ ] Student FCE $395

**Received by 12 July:**
- [ ] Member FCN $925
- [ ] Non-Member FCN $975
- [ ] Student FCN $400
- [ ] Member FCP $950
- [ ] Non-Member FCP $1000
- [ ] Student FCP $425
- [ ] Member FCE $975
- [ ] Non-Member FCE $1025
- [ ] Student FCE $450

**At SIGGRAPH 2006:**
- [ ] Member FCA $1025
- [ ] Non-Member FCA $1075
- [ ] Student FCA $450
- [ ] Member FCP $1050
- [ ] Non-Member FCP $1100
- [ ] Student FCP $475
- [ ] Member FCE $1050
- [ ] Non-Member FCE $1100
- [ ] Student FCE $475
- [ ] Member FCA $1075
- [ ] Non-Member FCA $1125
- [ ] Student FCA $500

**Electronic Theater Ticket:**

- You must rank your time preference:
  - [ ] Monday 7 pm (670)
  - [ ] Tuesday 1:30 pm (671)
  - [ ] Tuesday 7 pm (672)
  - [ ] Wednesday 1:30 pm (673)
  - [ ] Wednesday 7 pm (674)

**Conference Select (CS)**

**Level CSN:** Includes Conference Select CD-ROM only. **Level CSE:** Includes Conference Select CD-ROM and printed Electronic Art & Animation Catalog.

The content of the printed version of the Electronic Art & Animation Catalog is included on the Conference Select CD-ROM.

**Received by 23 June:**
- [ ] Member CSN $225
- [ ] Non-Member CSN $245
- [ ] Student CSN $195
- [ ] Member CSE $250
- [ ] Non-Member CSE $270
- [ ] Student CSE $220

**Received by 12 July:**
- [ ] Member CSN $255
- [ ] Non-Member CSN $275
- [ ] Student CSN $225
- [ ] Member CSE $280
- [ ] Non-Member CSE $300
- [ ] Student CSE $250

**At SIGGRAPH 2006:**
- [ ] Member CSN $285
- [ ] Non-Member CSN $305
- [ ] Student CSN $255
- [ ] Member CSE $310
- [ ] Non-Member CSE $330
- [ ] Student CSE $280

**Electronic Theater Ticket:**

- You must rank your time preference:
  - [ ] Tuesday 1:30 pm (671)
  - [ ] Wednesday 1:30 pm (673)

## One Day (OD)

**Received by 23 June:**
- [ ] $300

**Received by 12 July:**
- [ ] $350

**At SIGGRAPH 2006:**
- [ ] $385

**Days in Attendance:**

- [ ] Sunday (SUN)
- [ ] Monday (MON)
- [ ] Tuesday (TUES)
- [ ] Wednesday (WED)
- [ ] Thursday (THUR)
- [ ] Undecided (ODU)

**Days ______ X $ ______ = ______

## Exhibits Plus (EP)

**Received by 23 June:**
- [ ] $75

**Received by 12 July:**
- [ ] $95

**At SIGGRAPH 2006:**
- [ ] $95
First Name __________________________________________ Last Name __________________________________________

Telephone (Include all country, area, and city codes.) __________________________ Fax __________________________ Email __________________________

Part 2A Student Registration Sponsorship  Optional $10

☐ $10 donation toward the sponsorship of a student registration for SIGGRAPH 2006 (SD)

As a new initiative to encourage more student participation at SIGGRAPH, we are asking each registered attendee to donate $10 to support this student initiative. This funding will be allocated to support students who might not otherwise be able to participate in SIGGRAPH.

Your donation is greatly appreciated.

Part 3 Merchandise

<table>
<thead>
<tr>
<th>Item#</th>
<th>Quantity</th>
<th>Cost</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Mug (490)</td>
<td>___________</td>
<td>$15</td>
<td>___________</td>
</tr>
<tr>
<td>T-shirt (500)</td>
<td>___________</td>
<td>$20</td>
<td>___________</td>
</tr>
<tr>
<td>Polo Shirt (520)</td>
<td>___________</td>
<td>$37</td>
<td>___________</td>
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<td>Coffee Mug (525)</td>
<td>___________</td>
<td>$15</td>
<td>___________</td>
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<tr>
<td>Youth T-shirt (560)</td>
<td>___________</td>
<td>$15</td>
<td>___________</td>
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<tr>
<td>Hooded Sweatshirt (570)</td>
<td>___________</td>
<td>$50</td>
<td>___________</td>
</tr>
<tr>
<td>SIGGRAPH 2006 Video Review Set (DVD) Member (601)</td>
<td>___________</td>
<td>$120</td>
<td>___________</td>
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<tr>
<td>SIGGRAPH 2006 Video Review Set (DVD) Non-Member (601)</td>
<td>___________</td>
<td>$180</td>
<td>___________</td>
</tr>
</tbody>
</table>

ALL items MUST BE PICKED UP at SIGGRAPH 2006 in the Merchandise Pickup Center.

Part 4 Electronic Theater Ticket Purchase

Please rank your preference:

___ Monday 7-9 pm (770)  ___ Tuesday 1:30-3:30 pm (771)  ___ Tuesday 7-9 pm (772)  ___ Wednesday 1:30-3:30 pm (773)  ___ Wednesday 7-9 pm (774)

One ticket is already included with Full Conference and Conference Select registrations. Registrants in any category can purchase one additional ticket.

Quantity (1) x Cost $50 = Subtotal $50

Part 5 Credential Mailing

Two-day express mail to:  ☐ Continental US/Canada. Cost: $15 per person (990)  ☐ Outside continental US/Canada. Cost: $30 per person (991)

IMPORTANT: See Registration Instructions & Policies for residential mailing instructions and deadlines.

Part 6 Processing Fee  For fax or mail (992)

Processing Fee Subtotal $15

Part 7 Payment Information

Total Amount Due $__________

☐ Check or money order is enclosed, payable to SIGGRAPH 2006.
☐ American Express  ☐ MasterCard  ☐ Visa  Credit card # __________________________ Expiration date ____________

Name __________________________________________ Signature __________________________

(I authorize payment for the amount due for this registration to be processed as I have indicated.)

Please fax both pages of this registration form.
Do It for Yourself AND Your Company: Tips to Pass On to Employers

Attend SIGGRAPH 2006 and Return Inspired by the Innovation

Knowing that the majority of SIGGRAPH conference attendees rely on their employers to fund their registration and travel in part or in full, we have developed the following value-based talking points for you to share with your boss.

- **Value.** SIGGRAPH is the only place you can find best-practice-based education with an average cost of $30 per session*, significantly leveraging your organization’s training dollars.

- **Emerging Technologies.** Only at SIGGRAPH do the most competitive, bleeding-edge minds in emerging technologies from around the world come together cooperatively for you to interact and engage with, bringing the future back to your organization today.

- **Industry Visionaries.** SIGGRAPH gives you access to hear first-hand accounts from industry icons, who were once in your shoes, about how and where their visions and inspiration were born.

- **Hands-On Know How.** Acquiring the most current information in an interactive environment is the only way to protect and leverage the significant investment your company has made in graphics technology.

- **One-Stop Shopping.** With budget time right around the corner, you need to start researching options and opportunities. What better way than with more than 250 exhibitors from five continents all in one place?

- **Personally Relevant Education.** One SIGGRAPH week offers nearly 300 education-based sessions to choose from, allowing you to tailor a personal education program that ensures you are learning something new and specifically relevant to your organization’s needs.

- **Saves Time.** Because, while a week out of the office seems difficult, having to take up to a year to amass the directly relevant information and education you could gain in one week would be downright daunting.

- **Register Early and Afford More!** If you register early, you can save enough to buy a discount airline ticket, reducing your organization’s out-of-pocket costs.

- **Convenience.** SIGGRAPH 2006 is coming to northeast North America (and the hub of academia and research) for the first time in 17 years, making this year’s conference convenient to the eastern U.S. and Canada, as well as Europe.

- **Inspiration.** After your SIGGRAPH 2006 experience, you’ll return to work rejuvenated and inspired, ready to bring your most creative ideas and new knowledge to the table.

* Based on an average attendee’s participation in 25 sessions of various types over five days at the SIGGRAPH 2006 Member Discounted Registration rate.

Future Conference Dates

SIGGRAPH 2007
5 - 9 August 2007
San Diego, California

SIGGRAPH 2008
11 - 15 August 2008
Los Angeles, California