

(<http://www.siggraph.org/s2010>)

SIGGRAPH 2010



SUNDAY, 25 JULY (ALL DAY) TBD

Birds of a Feather Animazing Spotlight on Animation

The judging panel for the Animazing Spotlight festival includes many luminaries of animation, a few of whom will be on hand to discuss this artform we love so much.



SUNDAY, 25 JULY 9:00 AM - 6:00 PM West Lobby

International Center International Center

The International Center offers bilingual tours of SIGGRAPH 2010 programs, informal translation services, and space for meetings, talks and demonstrations.



SUNDAY, 25 JULY 10:00 AM - 1:00 PM International Center, West Lobby

International Resources Events SpaceTime Showcase

Digital review of projects accepted to the annual SpaceTime competition featuring the state of creative computer-based student work from around the globe.

Contact: Marc Barr, [mjbarr \(at\) mtsu.edu](mailto:mjbarr@mtsu.edu)



SUNDAY, 25 JULY 11:00 AM - 12:00 PM Room 301 A

Birds of a Feather iTokyo+IVRC

Interactive-Tokyo(iTokyo) and IVRC2010, the 18th annual student competition, are VR and interactive-techniques events in Japan. Laval Virtual (France) and CMU ETC (USA) have exchanges with iTokyo+IVRC.



SUNDAY, 25 JULY 12:00 PM - 5:30 PM Room 151

Emerging Technologies Emerging Technologies

Interactive demonstrations of innovative technologies in a broad range of applications, including displays, robotics, input devices, and interaction techniques. Emerging Technologies includes a mix of works invited by the organizers and works selected from juried submissions. All the demos are available for attendees to try out and discuss with the creators.



SUNDAY, 25 JULY 12:00 PM - 5:30 PM West Lobby

Posters Posters

Observe graphic displays of incremental, preliminary, partial, and innovative insights that will shape the future of computer graphics and interactive techniques.



SUNDAY, 25 JULY 12:00 PM - 5:30 PM Outside Room 403 AB

The Sandbox The Sandbox

Test drive current game-development technologies, explore game design, and play the games that are defining the next generation of digital interactivity.



SUNDAY, 25 JULY 12:00 PM - 5:30 PM Room 151

The Studio The Studio

Collaborate in hands-on learning lab, where students, professionals, artists, scientists, engineers, and the latest technologies create surprising artworks and systems.



SUNDAY, 25 JULY 12:00 PM - 5:30 PM Room 151

Art Gallery TouchPoint: Haptic Exchange Between Digits

The work exhibited in the SIGGRAPH 2010 Art Gallery investigates the polysensory nature of human experience in a technologically enhanced environment. The exhibition explores the permeable membrane of the techno-human interface, where we engage an array of tools to materialize and visualize artifacts of creative expression. Integral to the work is human haptic interaction, involving the "viewer" and/or the artist through a unique physical interface.



SUNDAY, 25 JULY 12:15 PM - 1:45 PM Room 151

The Studio–Workshops
3D Character Animation In Depth

An in-depth look at 3D character animation for film and video games. Topics include the process of acting out references, creating customized MEL scripts, hot keys, animation-pipeline tools, blocking pose to pose vs. straight ahead, key framing vs. dynamics, layering animation, animation polishing with tangents, follow through and overlapping actions, adding moving holds, and tricks and shortcuts to make animating fast, efficient, and fun.



SUNDAY, 25 JULY 12:30 PM - 1:45 PM Room 151

The Studio–Digital Artistry
HDR Imaging

This presentation explores the whys and hows of HDR imaging as the digital world's answer to Ansel Adams' Zone System. It shows and illustrates what can be achieved with dynamic-range capture and covers how to shoot and process it, related software applications, and how to simulate it when multi-exposure image capture is not possible.



SUNDAY, 25 JULY 12:30 PM - 1:00 PM Room 151

The Studio–Presentations
Tactile Tactics: Getting Close to Technology

As computers become smarter, stronger, and more woven into the fabric of the world, it is increasingly important to make sure they don't autonomously cause harm. Even better, they should support health and welfare. But how can technology know what's good for others, especially when people so often get it wrong? One way is for computers to gauge emotional responses to their actions. Another approach would be to create machines that have genuine feelings akin to our own. Taken together, these concepts provide the foundation for exploring artificial empathy.

This talk summarizes a project that contributes to artificial empathy by building robots that engage participants through playful touch. Touch is featured because it is a basic, primary and direct means of inducing feeling. It also avoids relying on anthropomorphic features that do not relate to a machine's instruments. The talk expands the argument for touch as a basis for artificial empathy, discusses the value of games as a framework for guiding touch interaction, and outlines some recent projects.



SUNDAY, 25 JULY 2:00 PM - 3:30 PM Room 151

The Studio–Presentations
Introduction to Rhino

This talk answers two basic questions: What is Rhino? What does it do? Then it demonstrates how to model a

salt and pepper shaker.



SUNDAY, 25 JULY 2:00 PM - 3:30 PM Room 151

**The Studio–Digital Artistry
Intro to 3D Capabilities in Photoshop CS5 Extended**

This high-level introduction to Photoshop CS5 includes details on all the new 3D-related features in Photoshop CS5 Extended.



SUNDAY, 25 JULY 2:00 PM - 3:30 PM Room 301 A

**Birds of a Feather
LA SIGGRAPH Meet & Greet**

The Los Angeles Chapter of ACM SIGGRAPH proudly presents an informal Meet & Greet, open to all attendees, with current and past chapter officers and Executive Council members.



SUNDAY, 25 JULY 2:00 PM - 3:30 PM Room 151

**The Studio–Workshops
Modeling with Zbrush**

How to use Zbrush as a tool for 3D modeling. No previous Zbrush knowledge required. Workshop topics include organic forms and high-poly detailing.



SUNDAY, 25 JULY 3:30 PM - 4:30 PM International Center, West Lobby

**International Resources Events
SpaceTime Student Exhibition Opening**

Opening and awards presentation for ACM SIGGRAPH SpaceTime Student Exhibition.

Contact: Marc Barr, [mjbarr \(at\) mtsu.edu](mailto:mjbarr@mtsu.edu)



SUNDAY, 25 JULY 3:45 PM - 4:45 PM Room 507

**Birds of a Feather
ACM SIGGRAPH Digital Art Community**

Be part of the year-round ACM SIGGRAPH experience. Join the SIGGRAPH Digital Art Community, connect

with other digital artists, and share ideas on building community for the future.



SUNDAY, 25 JULY 3:45 PM - 5:30 PM Room 151

The Studio–Digital Artistry
Curvy 3D v2: 3D Sculpting for 2D Artists

Curvy 3D is a digital sculpting program made for artists with a 2D mind, such as illustrators who want to add 3D content to their 3D layers or games.



SUNDAY, 25 JULY 3:45 PM - 4:15 PM Room 151

The Studio–Presentations
hanahanahana

This talk summarizes an interactive installation in the SIGGRAPH 2010 Art Gallery (TouchPoint: Haptic Exchange Between Digits) that explores the expressive possibilities of scent information. The work enables real-time visualization of scent flow in ambient air. More concretely, it visualizes temporal and spatial variations of flowing air by projecting images that change with the flow of scent-distribution data. Participants apply perfume to a leaf-shaped piece of paper and hold or shake it in front of the wall. Then a flower image appears on each bud-like device. The flower's transparency changes gradually according to the strength of the floating scent. The color and shape vary according to the sort of fragrance applied to the paper. Participants enjoy temporal and spatial variations of floating olfactory sensations, visual sensations from the projection screen, and tactile sensations from air movements.



SUNDAY, 25 JULY 3:45 PM - 5:15 PM Room 151

The Studio–Workshops
Imagination Made Solid: An Introduction to Personal Fabrication and Desktop Manufacturing

Turn your ideas into real things! In this workshop, attendees use simple 3D modeling programs to create designs for real things and work with a MakerBot to produce the real-world results.



SUNDAY, 25 JULY 4:30 PM - 5:30 PM International Center, West Lobby

**International Resources Events
Overview of SIGGRAPH 2010 (with Japanese Interpreter)**

Members of the SIGGRAPH 2010 Committee present an overview of the conference and highlights of their programs.

Contact: Miho Aoki, mihoalaska (at) gmail.com



SUNDAY, 25 JULY 4:30 PM - 5:30 PM Room 151

**The Studio—Presentations
Tom Gasek: A Life in Stop Motion**

Tom Gasek shares examples of his commercial work, including commercials for Sony Bravia, the State of Mississippi anti-smoking campaign, and much more. He also shows behind-the-scenes footage from various shoots for Aardman Animations and his own OOH, Inc., and shares some scenes from his just-completed short film, "Off Line".



SUNDAY, 25 JULY 6:00 PM - 8:00 PM West Hall B

**Technical Papers Fast Forward
Technical Papers Fast Forward**

The world's leading experts in computer graphics and interactive techniques preview their latest work in provocative, sometimes hilarious summaries of the field's evolution.



MONDAY, 26 JULY 9:00 AM - 12:00 PM Room 151

**The Studio—Workshops
Dynamic 3D Integration in CS5 Extended**

In this hands-on workshop, attendees explore the new 3D features in Photoshop CS5 Extended and learn how easy it is to integrate 3D objects into creative workflows.



MONDAY, 26 JULY 9:00 AM - 5:30 PM Room 151

**Emerging Technologies
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MONDAY, 26 JULY 9:00 AM - 10:30 AM Room 151

**The Studio—Presentations
Rhinoceros/Rendering: Getting Started with Flamingo nXt**

A demonstration of the basic steps of rendering with nXt: opening a model, lighting, creating materials, editing materials, and adding a ground plane.



MONDAY, 26 JULY 9:00 AM - 5:30 PM Outside Room 403 AB

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MONDAY, 26 JULY 9:00 AM - 10:30 AM Room 151

The Studio—Digital Artistry
Vivesa to Enhance Your Photographic Art

Discover why this plug-in tool can save you lots of time. Nik Software's leading retouching authority explains how to get the most out of your images, reveals some special tricks, and demonstrates how to visualize and draw out the mood, depth, and excitement in images. Topics include getting the most out of your workflow, optimizing raw images, noise-reduction techniques, global adjustments vs. targeted adjustments, selective enhancements, bringing out detail, applying traditional techniques, and developing a personal style through retouching.



MONDAY, 26 JULY 10:00 AM - 1:00 PM International Center, West Lobby

International Resources Events
SpaceTime Showcase

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Contact: Marc Barr, [mjbarr \(at\) mtsu.edu](mailto:mjbarr@mtsu.edu)



MONDAY, 26 JULY 10:00 AM - 11:30 AM Room 301 B

Birds of a Feather
FJORG! Reunion

Former FJORG! participants and volunteers are invited to reunite with old friends. This is a great chance to

network, revisit memories of competitions past, and plan ahead for future events.



MONDAY, 26 JULY 10:45 AM - 12:15 PM Room 151

The Studio—Digital Artistry
Illustrating Using Photoshop CS5's New Painting Tools

Comic book creator and digital pioneer Brian Haberlin explains the ins and outs of illustrating using Photoshop's new brushes and shows how blending the new tools with the old can change the way you work with Photoshop.



MONDAY, 26 JULY 10:45 AM - 12:15 PM Room 151

The Studio—Presentations
KeyShot: The Key to Amazing Shots

KeyShot (formerly known as HyperShot) is an interactive ray-tracing and global illumination program developed by Luxion for both PC and Mac that breaks down the complexity of creating photographic images from 3D models. Because it's easy to use, KeyShot gives anybody involved with 3D data the ability to create photographic images in a matter of minutes, independent of the size of the digital model. KeyShot supports many native file formats, including Rhinoceros, SketchUp, SolidWorks, Obj, IGES and STEP. This workshop focuses on creating stunning images from Rhino models in seconds.



MONDAY, 26 JULY 11:00 AM - 12:45 PM West Hall B

ACM SIGGRAPH Award Presentation
ACM SIGGRAPH Award Presentation

Immediately preceding the Monday keynote presentation, ACM SIGGRAPH announces its 2010 awards: the Computer Graphics Achievement Award, the Significant New Researcher Award, the Distinguished Artist Award for Lifetime Achievement in Digital Art, and the Outstanding Service Award.



MONDAY, 26 JULY 11:00 AM - 1:00 PM Room 301 A

Birds of a Feather
Animux: Free Software for Animators

Animux is an absolutely FREE animation toolset for handling all the pre-production, production, and post-production tasks in a high-quality animation project.



MONDAY, 26 JULY 11:00 AM - 12:45 PM West Hall B

Keynote Speakers

Don Marinelli, Executive Producer, Carnegie Mellon Entertainment Technology Center

Don Marinelli, professor of Drama and Arts Management, is the executive producer of Carnegie Mellon's Entertainment Technology Center, a joint initiative between the College of Fine Arts and the School of Computer Science. The initiative brings artists and technologists together to produce installations that entertain, inform, inspire, or otherwise affect an audience, guest, player, or participant.

Over the past 29 years, he has served various roles at Carnegie Mellon, including co-creator of the Master of Arts Management Program, co-creator of the Master of Fine Arts in Acting degree program with the Moscow Art Theatre School in Russia, and co-founder (with Randy Pausch) of the Master of Entertainment Technology Degree Program. He holds degrees from the University of Tampa and Duquesne University, and a PhD from the University of Pittsburgh.

His book, *The Comet and the Tornado*, published this year, recounts the six years he and Pausch shared an office and created the center that has become recognized internationally as Carnegie Mellon's "Dream Fulfillment Factory".



MONDAY, 26 JULY 12:15 PM - 1:45 PM Room 151

The Studio—Workshops Traditional Animation With Flash

How to use Flash's onion skinning capabilities to produce traditional 2D animation using tablets. If you are interested in traditional animation in the digital age, this is your workshop.



MONDAY, 26 JULY 12:30 PM - 1:45 PM Room 151

The Studio—Digital Artistry Camera Sensor Calibration

Each camera model has different responses for long exposures or combined exposures for HDR. This presentation explains sensor response and sensor noise, and how to establish the sensor response for your own camera. Topics include: How does a camera sensor work? What is sensor noise? How to evaluate your camera sensor. What does sensor noise add to your image exposure? How to build an exposure gain chart for your camera. Post noise control. Determining limits to image sensors.



MONDAY, 26 JULY 12:30 PM - 1:00 PM Room 151

The Studio—Presentations DIY Time-Lapse Motion-Control Systems

xRez Studio presents current innovations in DIY motion-control systems for time-lapse photography. Traditional time-lapse is static and locked off, but new techniques using astronomical mounts, Arduino controllers, and DSLR video gear allow new abilities to pan, tilt, and dolly the camera, resulting in rich cinematic moves. Further integration with 3D animation software and digital terrain modeling allow large-scale fly-throughs on large

panoramic landscapes. This project also shows recent work at xRez Studio, including new gigapixel robotic heads, full-dome production, and spherical-animation creation.



MONDAY, 26 JULY 1:15 PM - 1:45 PM Room 151

The Studio—Presentations
LIDAR Scanning for Visualization and Modeling

An overview of LIDAR technology (light detection and ranging laser) and its uses for cultural-heritage preservation, BIM models, and entertainment.



MONDAY, 26 JULY 2:00 PM - 3:30 PM Room 403 AB

ACM SIGGRAPH Award Talks
ACM SIGGRAPH Award Talks

Recipients of the 2010 ACM SIGGRAPH Awards present brief talks on their work and the future of computer graphics and interactive techniques.



MONDAY, 26 JULY 2:00 PM - 3:30 PM Room 301 A

Birds of a Feather
Blender Foundation: Community Meeting

Blender Foundation Chairman Ton Roosendaal presents work done on the free/open-source Blender tool in the past year and discusses and reviews plans for next year.



MONDAY, 26 JULY 2:00 PM - 3:30 PM Room 151

The Studio—Digital Artistry
Digital Traditional: A way of Digital Painterly Thinking

Traditional media such as drawing and painting have been introduced into the digital realm. This workshop covers how to duplicate traditional markings in a digital medium so the art still exhibits the spontaneous connections we are all so familiar with.



MONDAY, 26 JULY 2:00 PM - 3:30 PM Room 151

The Studio—Workshops
Jamie Caliri and Dragon: The Stop-Motion Software

A hands-on Dragon software and hardware workshop with Jamie Caliri.



MONDAY, 26 JULY 2:00 PM - 3:30 PM Room 151

**The Studio—Presentations
Photography for Macro/Micro/Nano Subjects**

Newly developed software and robotic systems now make it possible to image macro, micro, and/or nano subjects with astounding depth of field, quality, and gigapixel resolution. Learn how these technologies are being used by researchers, educators, and the public to explore and share the resulting imagery across the globe.



MONDAY, 26 JULY 3:45 PM - 5:30 PM Room 151

**The Studio—Digital Artistry
Digital SLRs and Video Editing and Effects**

Many people are rushing to Digital SLRs (capable of shooting full-frame 1080p, 24 frames per second with high-quality photographic lenses) for video because they provide beautiful film-like videos on a small budget. This session teaches how to edit footage captured on the camera in Premiere Pro, how to use green screen techniques and compositing in After Effects, and how to output to Flash for the web and DVD.



MONDAY, 26 JULY 3:45 PM - 4:30 PM Room 151

**The Studio–Presentations
Gigapan**

Learn about gigapixel imagery and the GigaPan process, including its applications for educators and students, professional and amateur photographers, and scientists.

The GigaPan process allows users to upload, share, and explore brilliant gigapixel+ panoramas from around the globe. It consists of three innovations: a robotic camera mount for automatically capturing hundreds to thousands of images using a standard digital camera, custom software for stitching images into very high-resolution (gigapixel) panoramas, and a new type of web site for sharing and exploring these panoramas.

GigaPan is the newest development of the Global Connection Project at Carnegie Mellon University, which aims to introduce us to our neighbors across the globe and help us learn about our planet. GigaPan will help bring distant communities and peoples together through images that have so much detail that they are, themselves, objects of exploration, discovery and wonder. Enabling people to explore, experience, and share each other's worlds can be a transforming experience. Our mission is to make all aspects of the GigaPan experience accessible and affordable to the broadest possible community.

GigaPan is a collaboration among the NASA Ames Intelligent Robotics Group, the CREATE Lab at Carnegie Mellon University, and Google, Inc.



MONDAY, 26 JULY 3:45 PM - 5:15 PM Room 151

**The Studio–Workshops
Rhinceros: Modeling a Matched Salt & Pepper Shaker for RP or Machining**

Guided hands-on construction of a matched salt and pepper shaker that could be used for RP or machining.



MONDAY, 26 JULY 4:00 PM - 5:00 PM International Center, West Lobby

**International Resources Events
CG in Latino Countries**

Overview of the state of CG in Latino countries. The session ends with a celebratory piñata. The session includes a special presentation by various studios in Latin America.

Contact: Marilenis Olivera, marilenis (at) gmail.com



MONDAY, 26 JULY 4:00 PM - 6:00 PM Room 301 A

Birds of a Feather

Blender Foundation: Durian Open Movie Presentation

Presentation and interactive making-of session by the artistic and development team that completed the third Blender Open Movie project.



MONDAY, 26 JULY 4:30 PM - 5:30 PM Room 151

The Studio—Presentations Jamie Caliri: Stop-Motion Cinematography in the Digital Age

Jamie Caliri shows examples of his work and discusses the creative and technical challenges of working with stop motion, then presents an in-depth technical exploration of stop-motion cinematography. The session concludes with a demo of how Dragon Stop Motion software and the newest Dragon hardware were used in a recent 3D stop-motion shoot.



MONDAY, 26 JULY 7:00 PM - 10:00 PM Manhattan Room - Sheraton Los Angeles Downtown

Birds of a Feather UNC - Chapel Hill SIGGRAPH Alumni Reception

Reception for UNC-Chapel Hill Computer Science alumni and friends.



MONDAY, 26 JULY 8:30 PM - 11:00 PM Garden East - Wilshire Grand Los Angeles

Birds of a Feather Taipei ACM SIGGRAPH Reunion

This session is for attendees from Taiwan and everyone interested in graphics research or the computer graphics industry in Taiwan.



TUESDAY, 27 JULY 8:00 AM - 10:00 AM Room 301 A

Birds of a Feather Women in Animation

This session is open to everyone, male and female, interested in computer graphics. Women in Animation is an international, professional organization (www.womeninanimation.org).



TUESDAY, 27 JULY 8:30 AM - 10:30 AM Room 402 A

Birds of a Feather

Studio Views of Student Demo Reels

Industry professionals from various computer animation and visual effects facilities explain what they (and their studios) look for when reviewing demo reels and portfolios of both students and recent graduates.



TUESDAY, 27 JULY 9:00 AM - 10:00 AM Room 507

Birds of a Feather 2020 3D Media: Toward the Future in 3D Immersive Media

Other ways to capture, process, and represent immersive content are possible. Get acquainted with the European research perspective on the future of 3D media in this interdisciplinary meeting.



TUESDAY, 27 JULY 9:00 AM - 10:30 AM Room 151

The Studio–Presentations Dynamic 3D Lighting in CS5 Extended

This talk explores the 3D lighting capabilities that are now available in Photoshop CS5. Learn how to integrate your 3D object into a concept environment created in Photoshop and see how a 3D model created in a third-party 3D program can be lit with CS5 Extended's new image-based lighting and other 3D lighting techniques.



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TUESDAY, 27 JULY 9:00 AM - 10:30 AM Room 151

The Studio–Presentations Fast Interactive Web-Based Visualization of Giga-Pixel and Giga-Voxel Biomedical Datasets

Advances in biomedical imaging technologies allow acquisition of increasingly high-resolution datasets that represent 2D or 3D structures (either as serial 2D slices or true 3D acquisitions). With the addition of temporal (+T) information (2D+T; 3D+T), these structures convey crucial insight into biomedical functions, but remote interactive exploration of these datasets for visualization, annotation, and analysis remains a challenge. This talk presents a web-based visualization system for interactive exploration of giga-pixel and giga-voxel datasets. The system has been tested on a ~1.6-TB cardiac dataset of in vitro and in vivo MRI and histological slices covering

the full volume and accessed from various devices, including desktop systems, multi-touch surfaces, cell phones, and high-resolution display walls.



TUESDAY, 27 JULY 9:00 AM - 12:00 PM Room 151

The Studio–Workshops
GigaPan: Creating Interactive Gigapixel Panoramas

Building on each attendee's knowledge and interest in digital photography, this workshop explores panoramic photography with GigaPan, a robotic armature for digital cameras that helps you take explorable, high-resolution panoramas. Attendees create a small Gigapan panorama and learn how to use the stitching software. This activity introduces the possibilities and potential challenges of using the device, and shows how a Gigapan image is assembled. Then attendees experiment with networked digital images, including the ability to share images, comment on them, and change the context of images on the [GigaPan web site](#).



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TUESDAY, 27 JULY 9:00 AM - 10:30 AM Room 151

The Studio—Digital Artistry Wacom Tablet Mastery

Wacom pen tablets and interactive pen displays play an integral role in the creative process. Illustrators, concept artists, matte painters, and others rely on the pen's precision and control, but its power doesn't stop there. Innovative features, such as ExpressKeys, Touch Rings, Radial Menus, and more keep Wacom tablet users focused on their creative vision instead of technology. This presentation covers basic and advanced tablet use, creating and using pen-centric brushes in Adobe Photoshop CS5, and advanced tablet-control panel configuration. Attendees are eligible to win a copy of PhotoshopCAFE's Wacom Tablets and Photoshop CS5.



TUESDAY, 27 JULY 9:30 AM - 6:00 PM Hall H & J

Exhibition Exhibition

The SIGGRAPH 2010 Exhibition is your best opportunity to explore this year's new software, hardware, and services offered by vendors from throughout the world.



TUESDAY, 27 JULY 9:30 AM - 6:00 PM Hall K

Job Fair Job Fair

Actively looking for a new job? Networking to see what opportunities are available? Interested in meeting with some great companies? The Job Fair is where SIGGRAPH 2010 attendees connect with employers before the

conference, during the conference via the Job Fair, and after the conference via the CreativeHeads.net job board and candidate profiling system.



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TUESDAY, 27 JULY 10:00 AM - 10:30 AM International Center, West Lobby

**International Resources Events
Fab Lab**

This presentation showcases the Fab Lab network, an international project that allows the public to learn about science and engineering, and to design machines and make measurements to improve the quality of their lives.

Contact: Katie Rast, [katie \(at\) fablabsd.org](mailto:katie@fablabsd.org)



TUESDAY, 27 JULY 10:00 AM - 11:30 AM Room 301 B

**Birds of a Feather
The ASIFA-Hollywood Animation Educator's Forum Asks the Question: Is It Important to Teach
Traditional Skills in a Digital Age?**

This discussion is for people who are interested in animation education and would like to be part of our discussion on teaching animation (and animation-related topics) in the digital age



TUESDAY, 27 JULY 10:30 AM - 10:45 AM International Center, West Lobby

**International Resources Events
International T-Shirt Giveaway!**

ACM SIGGRAPH International Resources, in collaboration with San Diego Fab Lab gives away a t-shirt featuring a minimalist design based on an "inversion" of the official conference t-shirt, programmed LEDs, layered gel silkscreen, and hand-applied beadwork.

Contact: Sandro Alberti, salberti (at) siggraph.org



TUESDAY, 27 JULY 10:45 AM - 12:15 PM Room 151

**The Studio—Digital Artistry
10-Channel Photo-Imaging Workflow**

This workshop showcases a new imaging workflow based on the pioneering work of Dan Margulis. It summarizes a complete photo-enhancing workflow, from image acquisition in Lightroom to pre-adjustments in the Develop module and on to a radical 10-channel methodology for tone and color control that utilizes multiple color spaces and the unique channel structures of the image to build a sense of 3D shape and enhanced color.



TUESDAY, 27 JULY 10:45 AM - 12:45 PM Room 507

**Birds of a Feather
AnimationMaui: Online Animation Studio**

What does it take to make an online animation studio work? Come join this discussion of the challenges and hurdles in an online collaborative environment.



TUESDAY, 27 JULY 10:45 AM - 12:15 PM Room 151

**The Studio—Presentations
In the Line of Sight**

Daniel Sauter and Fabian Winkler introduce their current collaborative light installation *In the Line of Sight*, displayed in the SIGGRAPH 2010 Art Gallery (TouchPoint: Haptic Exchange Between Digits). Using historical examples, investigations into the violent qualities of light, and critical reflections on cutting-edge technological developments, Sauter and Winkler place their work in a rich context of surveillance systems, visual ambiguity, and light spectacles. The presentation concludes with a discussion of the artists' current work and research.



TUESDAY, 27 JULY 11:00 AM - 12:30 PM International Center, West Lobby

International Resources Events Chapters! Los Angeles USA

Ever wonder what it's like to live, work, and play in Los Angeles? Los Angeles-based production and post-production companies, and technical research and technical training schools, explain the advantages of working in the city that brought you Disney, the LightStage, and constant sunshine.

Contact: Carlye Archibeque, carlye (at) siggraph.org



TUESDAY, 27 JULY 11:00 AM - 12:30 PM West Hall B

Keynote Speakers

Jim Morris, General Manager and Executive Vice President of Production, Pixar Animation Studios

Jim Morris, Pixar's General Manager/Executive Vice President Production, has worked as a producer and production executive in the motion picture industry for many years and is currently producing Disney's "John Carter of Mars" for release in 2012. He is the production executive on Pixar's films, including "Ratatouille", "Up", "Toy Story 3", "Cars 2", "Brave", and "Monsters, Inc. 2". He produced Pixar's "WALL•E", which won the Oscar for Best Animated Film in 2009.

Prior to Pixar, he worked for Lucasfilm and its divisions for 17 years. He served as President of Lucas Digital Ltd. for 11 years, where he was responsible for Industrial Light & Magic, Lucasfilm Animation, and Skywalker Sound. Concurrently, he served as ILM's General Manager, where he supervised a staff of more than 1,400 artists and technicians, and guided the largest visual effects facility in the entertainment industry. Under his leadership, ILM created the groundbreaking, Academy Award-winning visual effects seen in "Jurassic Park", "Death Becomes Her", "Forrest Gump", and over 150 other films.

For his work on "WALL•E", he received a British Academy Award (BAFTA), The Golden Globe, the AFI Award, the National Board of Review Award, the Los Angeles Film Critics Best Picture Award, the Broadcast Film Critics Award, the Monitor Award, the Saturn Award, the VES Award for Outstanding Animation, and the Producers Guild Award.

He earned a BS degree in film, from the Newhouse School, Syracuse University, and he holds a MS in television and radio from the same institution. He has served as president of the San Francisco Film Commission and was the founding chair of the Visual Effects Society (VES). He is a member of the Motion Picture Academy and the Producers Guild.



TUESDAY, 27 JULY 11:15 AM - 12:15 PM Back of Hall H

Exhibitor Tech Talks AMD



TUESDAY, 27 JULY 12:15 PM - 1:30 PM Room 301 B

Birds of a Feather Your Digital Media Start-up: How to Launch your New Business

This session is for attendees who want to learn how to launch a technology start-up. The focus is on organizational strategy, funding approaches, and IP protection.



TUESDAY, 27 JULY 12:15 PM - 1:45 PM Room 151

**The Studio–Workshops
3D Animation and Rendering Made Simple**

Bunkspeed creates 3D rendering and animation tools that are simple enough to learn and use quickly, but achieve results that rival the experts in the field. This hands-on workshop presents the fundamentals of animation in Bunkspeed Move and image rendering in Bunkspeed Shot.



TUESDAY, 27 JULY 12:15 PM - 1:15 PM West Lobby

**Poster Sessions
Poster Session**

SIGGRAPH 2010 Posters are presented and discussed in scheduled sessions where poster authors meet with attendees. These sessions provide a low-key venue for participants to meet and converse with people who share their interests.



TUESDAY, 27 JULY 12:30 PM - 2:00 PM International Center, West Lobby

**International Resources Events
Inter-Society for the Electronic Arts (ISEA) Open Forum**

ISEA is an international non-profit organization fostering interdisciplinary academic discourse and exchange among culturally diverse groups and individuals working with art, science, and emerging technologies. This discussion includes information about the organization, the upcoming ISEA2010, which will take place in the Ruhr region of Germany (Dortmund, Essen, Duisburg), 20 - 29 August 2010, and the 17th International Symposium on Electronic Art (ISEA2011), in Istanbul, Turkey.

Contact: Sue Gollifer, S.C.Gollifer (at) bton.ac.uk



TUESDAY, 27 JULY 12:30 PM - 2:00 PM Room 301 A

**Birds of a Feather
ACM SIGGRAPH Carto BOF**

The ACM SIGGRAPH Cartographic Visualization (Carto) BOF explores how viewpoints and techniques from the computer graphics community can be effectively applied to cartographic and spatial datasets.



TUESDAY, 27 JULY 12:30 PM - 1:45 PM Room 151

**The Studio–Digital Artistry
Fine-Art Printmaking Workflow**

This workshop focuses on a personal workflow for developing and printing multiple proofs in an extremely efficient and effective way to arrive at the perfect print.



TUESDAY, 27 JULY 12:30 PM - 1:00 PM Room 151

**The Studio–Presentations
Methods for Collaboration in Virtual Realms**

The Communication Age has enabled dynamic exchange of information throughout the world. In education, the convergence of computers and media makes real-time exchange of ideas possible far beyond the traditional four walls of the classroom. Since the inception of the internet, resources have multiplied at unprecedented speeds, expanding information and communication opportunities to volumes beyond comprehension. Listserves, web sites, blogs, wikis, social networking, and virtual worlds are linking artists and providing opportunities to share images, concepts, and ideas from anywhere, at any time. This talk chronicles the experiences of several institutions, individuals, and educators who have embraced emerging communication technologies in the visual arts. It presents, compares, and contrasts faculty and student experiences, and explores several questions: What specifically has been done in various institutions around the globe to maximize the potential of communication technologies? How are students responding to the exchange of ideas and the expanded audiences in these virtual realms? What effect does anonymity have on peer-to-peer review of visual art?



TUESDAY, 27 JULY 1:00 PM - 3:30 PM San Jose A - Holiday Inn Los Angeles Convention Center

**Birds of a Feather
Collaborative Undergraduate Computing Studios Facilitating Decentralized Participation**

This session is for studio instructors and industry advisers associated with the NSF CreativeIT research project Collaborative Undergraduate Computing Studios Facilitating Decentralized Participation.



TUESDAY, 27 JULY 1:00 PM - 3:00 PM Room 402 A

**Birds of a Feather
COLLADA**

See cutting-edge DCC tools and applications for gaming, 3D web, and visualization, and artworks generated from COLLADA content-creation-supporting media.



TUESDAY, 27 JULY 1:15 PM - 1:45 PM Room 151

The Studio—Presentations
Avoiding Dark Ages II: Future-Proofing Digital Content

The film industry has lost a great deal of content due to disintegrating analog media. But with ever-changing formats and frequent hardware failures, they've discovered that digital content can be lost even faster. The move to a digital content workflow has intensified the need for a "future-proof" solution. This panel discussion is the first step in establishing an open forum on the subject.



TUESDAY, 27 JULY 1:15 PM - 1:45 PM Room 151

The Studio—Presentations
Using Intel (TM) Ct Technology for Data Parallel Computations in Your Graphics Pipeline

Parallelism is highly important for the graphics pipeline, but hardware mechanisms for exploiting parallelism exist at many different levels. While many technologies exploit parallelism at the cluster level, this talk focuses on the node level and below, specifically core and vector parallelism. Areas of discussion include:

- Mechanisms for improving the efficiency of modular C++ code and increasing programmer productivity via abstraction.
 - How to improve one's ability to write efficient parallel code at the node level.
 - A demo of workloads from seismic and medical imaging as well as Kirchhoff migration to show performance and productivity.
-



TUESDAY, 27 JULY 2:00 PM - 3:00 PM International Center, West Lobby

International Resources Events
Computer Graphics in Costa Rica

Overview of Costa Rica's CG and digital animation talent and projects.

Contact: Marisol Ibarra, mibarra (at) procomer.com; Gustavo Madrigal, administracion (at) morpho.tv



TUESDAY, 27 JULY 2:00 PM - 3:30 PM Room 151

The Studio—Digital Artistry
Looking In Looking Out: The Portrait Virus Blog

A summary of the progress and process of a self-portrait birthday blog created to offer a new self portrait every day for one year.



TUESDAY, 27 JULY 2:00 PM - 3:30 PM Room 151

The Studio—Workshops
Modeling With Zbrush

How to use Zbrush as a tool for 3D modeling. No previous Zbrush knowledge required. Projects include organic forms and high-poly detailing.



TUESDAY, 27 JULY 2:00 PM - 3:30 PM Room 151

**The Studio–Presentations
Rhinceros: Introduction to Brazil for Rhino**

This demonstration shows how to set up a simple rendering using Brazil for Rhino and how to control the quality of the rendering by adjusting simple skylight and anti-aliasing settings. Topics include creation and assignment of materials and environments.



TUESDAY, 27 JULY 2:00 PM - 3:30 PM Room 301 B

**Birds of a Feather
Web3D CAD Working Group**

This meeting of the Web3D consortium's CAD working group presents the new BREP component and demonstrates X3D implementations and a COLLADA -X3D content pipeline from CAD tools.



TUESDAY, 27 JULY 2:15 PM - 3:15 PM Back of Hall H

**Exhibitor Tech Talks
Intel Corporation**

Enabling Your Application to Take Advantage of the Intel® Media SDK and Intel® HD Graphics for Your Video Decode and Encode

The powerful and flexible Intel® Media SDK gives you the freedom to create a single code path for software-optimized and hardware-accelerated video encode, decode, and pre-processing functions in your media applications. Learn how to unleash the power of Intel® HD Graphics for your media creativity. Topics include:

- Intel® Media SDK overview
- How to use the Intel® Media SDK API
- How other application developers have taken advantage of the Intel® Media SDK and the Intel® HD Graphics

Presented by: Scott DiMicco, Intel Corporation



TUESDAY, 27 JULY 2:30 PM - 4:00 PM Room 301 A

**Birds of a Feather
Animation Mentor Demo Reel Reviews**

Please join the founders of Animation Mentor for a session of live demo reel reviews. Learn what professional animators look for when they look at your animation demo reel.



TUESDAY, 27 JULY 2:45 PM - 3:45 PM Room 507

**Birds of a Feather
Translating Culture Into Interactive Design**

Every culture has its own nuances. Designing interactive experiences for other cultures requires cultural understanding and efficient translation into core interaction.



TUESDAY, 27 JULY 3:30 PM - 5:00 PM Room 301 B

**Birds of a Feather
X3D and HTML5**

Progress and new initiatives on the X3D specification and proposed approaches to displaying an X3D scene inside an HTML page.



TUESDAY, 27 JULY 3:45 PM - 4:15 PM Room 151

**The Studio–Presentations
Creating Art Installations in Virtual Space**

Not necessarily simulations of reality, digital objects offer a unique aesthetic and possibility for interaction. As video games and social networking make virtual space socially acceptable and ubiquitous, it naturally becomes a medium in its own right for art making. This presentation explores how to use digital objects, both created and found, to produce site-specific installation art in virtual space.



TUESDAY, 27 JULY 3:45 PM - 5:15 PM Room 151

**The Studio–Workshops
I-CubeX Sessions**

The I-CubeX Sessions provide hands-on understanding of how to combine Live and Max/MSP/Jitter software with familiar controllers such as keyboards and I-CubeX sensors to capture performance gestures and create uniquely personal instruments for audio/visual expression.



TUESDAY, 27 JULY 3:45 PM - 5:30 PM Room 151

The Studio—Digital Artistry
Secrets of Digital Artists: Tips, Insights, and Techniques

Several of today's best digital artists share their knowledge and discuss issues related to digital and graphic art, from conception to final output.



TUESDAY, 27 JULY 4:00 PM - 6:00 PM Room 507

Birds of a Feather
3D & Multimedia Across Platforms and Devices Using JOGL

This session discusses the features, contributions, and future of OpenGL, OpenCL, and OpenMax across devices and OS exposed on top of Java using the JogAmp open-source libraries.



TUESDAY, 27 JULY 4:00 PM - 6:30 PM Garden East - Wilshire Grand Los Angeles

Birds of a Feather
ACCAD/OSU Alumni Gathering

This event is for attendees who have graduated or are currently attending The Ohio State University and are affiliated with the Advanced Computing Center for Arts & Design (ACCAD).



TUESDAY, 27 JULY 4:00 PM - 6:00 PM Room 402 A

Birds of a Feather
OpenCL

Meet designers and implementers of this significant new standard for heterogeneous parallel programming on GPUs and CPUs. Learn how OpenCL interoperates with OpenGL, enabling advanced, cross-platform, visual-computing applications.



TUESDAY, 27 JULY 4:30 PM - 6:00 PM Room 301 - Marriott Los Angeles Downtown

Birds of a Feather
RIT Alumni Reception at SIGGRAPH 2010

This event is for any Rochester Institute of Technology alumni who are attending SIGGRAPH 2010. Feel free to stop by and mingle with fellow alumni, friends, and faculty.



TUESDAY, 27 JULY 4:30 PM - 5:30 PM Room 151

The Studio—Presentations
Screen Novelties: Stop-Motion Nomads

Screen Novelties is an animation collective that takes a whimsical approach to filmmaking. Their fusions of classic cartoon dynamics with puppetry and stop-motion have earned them kudos from the likes of Harry Knowles and film legend Ray Harryhausen. Screen Novelties' award winning short films include "Mysterious Mose", "Monster Safari", and "The Tortoise & the Hare". They are currently developing their first feature film, "Monster Safari", in collaboration with the Jim Henson Company.



TUESDAY, 27 JULY 5:30 PM - 6:00 PM Room 301 A

Birds of a Feather
Encontro dos Brasileiros

This session is for attendees interested in computer graphics in Brazil who want to exchange some experiences and meet some friends!



TUESDAY, 27 JULY 5:30 PM - 6:30 PM Room 301 B

Birds of a Feather
Global Visual Effects Pipeline

Globalisation is a reality for most VFX studios. This session presents the The Moving Picture Company's perspective and offers an opportunity to discuss the challenges and solutions for a robust multi-site pipeline.



TUESDAY, 27 JULY 6:00 PM - 9:00 PM Diamond Foyer - JW Marriott

Birds of a Feather
Pioneer Reception (For SIGGRAPH Pioneer Members Only)



TUESDAY, 27 JULY 6:00 PM - 8:00 PM Room 408 AB

SIGGRAPH Dailies!
SIGGRAPH Dailies!

Watch the producers behind the pixels present images and short animations of extraordinary power and beauty, and tell their real-life production stories.



TUESDAY, 27 JULY 8:00 PM - 9:00 PM Salon C - JW Marriott

Birds of a Feather
Tokyo ACM SIGGRAPH Chapter Party

Tokyo ACM SIGGRAPH Chapter Party. Free admission.



WEDNESDAY, 28 JULY 9:00 AM - 10:00 AM International Center, West Lobby

**International Resources Events
ACM SIGGRAPH Chapters Business Meeting**

The annual business meeting for the ACM SIGGRAPH Chapters.

Contact: Scott Lang, scott (at) siggraph.org



WEDNESDAY, 28 JULY 9:00 AM - 5:30 PM Room 151

**Emerging Technologies
Emerging Technologies**

Interactive demonstrations of innovative technologies in a broad range of applications, including displays, robotics, input devices, and interaction techniques. Emerging Technologies includes a mix of works invited by the organizers and works selected from juried submissions. All the demos are available for attendees to try out and discuss with the creators.



WEDNESDAY, 28 JULY 9:00 AM - 6:00 PM West Lobby

**International Center
International Center**

The International Center offers bilingual tours of SIGGRAPH 2010 programs, informal translation services, and space for meetings, talks and demonstrations.



WEDNESDAY, 28 JULY 9:00 AM - 5:30 PM West Lobby

**Posters
Posters**

Observe graphic displays of incremental, preliminary, partial, and innovative insights that will shape the future of computer graphics and interactive techniques.



WEDNESDAY, 28 JULY 9:00 AM - 5:30 PM Room 151

The Studio–Workshops

SIGKids Special Girl Scout Programming: Games For Life

The SIGKids program offers a special workshop for Girl Scouts that will enable them to complete the majority of the requirements for the Games For Life Interest Project Award in a single day.



WEDNESDAY, 28 JULY 9:00 AM - 5:30 PM Outside Room 403 AB

The Sandbox The Sandbox

Test drive current game-development technologies, explore game design, and play the games that are defining the next generation of digital interactivity.



WEDNESDAY, 28 JULY 9:00 AM - 5:30 PM Room 151

The Studio The Studio

Collaborate in hands-on learning lab, where students, professionals, artists, scientists, engineers, and the latest technologies create surprising artworks and systems.



WEDNESDAY, 28 JULY 9:00 AM - 5:30 PM Room 151

Art Gallery TouchPoint: Haptic Exchange Between Digits

The work exhibited in the SIGGRAPH 2010 Art Gallery investigates the polysensory nature of human experience in a technologically enhanced environment. The exhibition explores the permeable membrane of the techno-human interface, where we engage an array of tools to materialize and visualize artifacts of creative expression. Integral to the work is human haptic interaction, involving the "viewer" and/or the artist through a unique physical interface.



WEDNESDAY, 28 JULY 9:30 AM - 6:00 PM Hall H & J

Exhibition Exhibition

The SIGGRAPH 2010 Exhibition is your best opportunity to explore this year's new software, hardware, and services offered by vendors from throughout the world.



WEDNESDAY, 28 JULY 9:30 AM - 6:00 PM Hall K

Job Fair
Job Fair

Actively looking for a new job? Networking to see what opportunities are available? Interested in meeting with some great companies? The Job Fair is where SIGGRAPH 2010 attendees connect with employers before the conference, during the conference via the Job Fair, and after the conference via the CreativeHeads.net job board and candidate profiling system.



WEDNESDAY, 28 JULY 10:00 AM - 1:00 PM International Center, West Lobby

International Resources Events
SpaceTime Showcase

Digital review of projects accepted to the annual SpaceTime competition featuring the state of creative computer-based student work from around the globe.

Contact: Marc Barr, [mjbarr \(at\) mtsu.edu](mailto:mjbarr@mtsu.edu)



WEDNESDAY, 28 JULY 10:00 AM - 11:00 AM International Center, West Lobby

International Resources Events
Animation by Japanese Students

DCAJ shows some of the Japanese student work that won prizes at the Digital Creators Competition 2009 and animations created by young artists from Korea and other countries.

Contact: Toshio Suzuki, [suzuki \(at\) dcaj.or.jp](mailto:suzuki@dcaj.or.jp)



WEDNESDAY, 28 JULY 10:00 AM - 10:30 AM Room 402 A

Birds of a Feather
Modular Legged Robotic System

A session about Modleg (A Modular Legged robot), its physics simulations, and its control over varying terrain with an accelerometer. The session includes video demos.



WEDNESDAY, 28 JULY 10:00 AM - 11:00 AM Room 301 A

**Birds of a Feather
OpenSceneGraph BOF**

This session is for OpenSceneGraph (OSG) users and interested parties. People interested in using OSG and discussing their use of OSG are encouraged to attend.



WEDNESDAY, 28 JULY 10:30 AM - 12:00 PM Room 301 B

**Birds of a Feather
X3D Medical Working Group**

Updates on progress of the X3D specifications for 3D medical imaging in DIACOM and improvements in the MedX3D browser. Demonstration of multiple X3D volume-rendering implementations.



WEDNESDAY, 28 JULY 10:45 AM - 12:15 PM Room 151

**The Studio—Presentations
Technology and Playing: An Artist's Presentation**

Tine Bech is a visual artist who works with interactive installations and public art. Her practice explores how we engage with our immediate environment. The work is intentionally accessible and often "hums and reacts with a playful anthropomorphic life that is liable to take you by surprise". She uses interactive electronics and location-tracking technology, urban spaces, and environmental elements such as gravity, water, sound, and light to develop spaces where participation, play, and immersive experiences take place. In this presentation, she discusses her practice-based research, which explores artistic application of interactive technologies to create immersive and playful art experiences in public spaces and galleries.



WEDNESDAY, 28 JULY 10:45 AM - 12:15 PM Room 151

**The Studio—Presentations
Toward an Ocean of Light: Interaction and Visualization in Three Physical Dimensions**

Squidsoup's work combines sound, physical space, and virtual worlds to produce immersive and emotive headspaces. Their work has been shown at numerous festivals, seminars, and galleries around the world, including ISEA, Lates at the Victoria and Albert Museum and Tate Britain, Kinetica Art Fair, SONAR, and the annual SIGGRAPH conference. Their talk focuses on recent projects and experiments, including [Glowing Pathfinder Bugs](#), exhibited in the SIGGRAPH 2010 Art Gallery (TouchPoint: Haptic Exchange Between Digits), that explore the creative potential of simple, natural forms of interaction combined with evocative, dynamic visuals that occupy physical space.



WEDNESDAY, 28 JULY 11:00 AM - 12:00 PM International Center, West Lobby

**International Resources Events
Industrial Application of CG in Japan**

DCAJ presents highly advanced industrial applications of CG technology.

Contact: Toshio Suzuki, suzuki (at) dcaj.or.jp



WEDNESDAY, 28 JULY 11:00 AM - 12:30 PM Room 507

**Birds of a Feather
Dynamic Simulation in Production**

This session is for attendees interested in hearing about and discussing the latest trends in dynamic simulation (rigid, cloth, hair, fluids, etc.) in production. Come. Connect. Collaborate. Experience. Enjoy. Eat.



WEDNESDAY, 28 JULY 11:15 AM - 12:15 PM Back of Hall H

**Exhibitor Tech Talks
AMD**



WEDNESDAY, 28 JULY 11:30 AM - 1:00 PM Room 506

**Birds of a Feather
Animazing Spotlight on Animation**

The judging panel for the Animazing Spotlight festival includes many luminaries of animation, a few of whom will be on hand to discuss this artform we love so much.



WEDNESDAY, 28 JULY 12:00 PM - 2:00 PM Room 301 A

**Birds of a Feather
Systems Administration Standards in Studios**

This session is for attendees interested in sharing non-proprietary information and open discussion of improving infrastructure, workflows, and support across the entertainment industry.



WEDNESDAY, 28 JULY 12:15 PM - 1:15 PM West Lobby

**Poster Sessions
Poster Session**

SIGGRAPH 2010 Posters are presented and discussed in scheduled sessions where poster authors meet with attendees. These sessions provide a low-key venue for participants to meet and converse with people who share their interests.



WEDNESDAY, 28 JULY 12:30 PM - 1:30 PM International Center, West Lobby

**International Resources Events
Professional Chapters and Student Chapters Start-Up Meeting**



WEDNESDAY, 28 JULY 12:30 PM - 1:00 PM Room 151

**The Studio–Presentations
BunkSpeed Shot: Rendering Made Simple**

Bunkspeed creates 3D rendering and animation tools that are simple enough to learn and use quickly, but achieve results that rival the experts in the field. This talk presents the fundamentals of image rendering in Bunkspeed Shot.



WEDNESDAY, 28 JULY 12:30 PM - 2:00 PM Room 507

**Birds of a Feather
Girl Scout Games for Life Parents and Troop Leaders Meeting**

This session, part of the Wednesday SIGKids program, is a Q & A about careers and education in the game industry.



WEDNESDAY, 28 JULY 1:00 PM - 2:00 PM Room 402 A

**Birds of a Feather
Field3D: An Open-Source Library for Storing Voxel Data**

This presentation and round-table discussion is for attendees interested in Field3D, an open-source library for volumetric data structures and file storage.



WEDNESDAY, 28 JULY 1:00 PM - 3:00 PM Room 301 B

**Birds of a Feather
Motion Graphics BOF**

This session is for attendees interested in motion graphics, titling, and compositing. Bring your reels, and let's discuss our projects.



WEDNESDAY, 28 JULY 1:00 PM - 2:30 PM Room 506

**Birds of a Feather
Simulating Humans and Animals**

Inviting academics, industry people, and all attendees interested in the current state and future trends of physics-based character animation.



WEDNESDAY, 28 JULY 2:00 PM - 3:00 PM Room 402 A

**Birds of a Feather
Molecular Graphics**

SIGGRAPH's longest-running (since 1982) Birds of a Feather session, Molecular Graphics, welcomes researchers, educators, and students interested in applying interactive graphics to biology, chemistry, and bio-informatics.



WEDNESDAY, 28 JULY 2:00 PM - 3:30 PM Theater 411

**Research Challenge
Research Challenge**

Individuals and teams developed innovative solutions to a challenge problem, demonstrating their creativity, design, and execution skills. Selected finalists present their work to a panel of distinguished judges in a public session, where final awards are announced.



WEDNESDAY, 28 JULY 2:00 PM - 5:00 PM San Jose A - Holiday Inn Los Angeles Convention Center

**Birds of a Feather
The Future of 3D Printing**

In this session for attendees interested in 3D printing, leaders in the 3D printing field discuss current and future technologies.



WEDNESDAY, 28 JULY 2:00 PM - 3:30 PM Room 151

**The Studio—Presentations
The Robot That Sharing Built: MakerBot**

MakerBot Industries, working at the crossroads of open-source web 2.0 culture and personalized manufacturing, sells an affordable DIY 3D printer. This talk maps pathways through the shifting landscape of community-based research and production, offers serious commentary on the opportunities for collaboration in manufacturing, and features evocative stories and anecdotes about rapidly manufactured engagement rings, body-part replication, news printed on toast, object teleportation over IP, and automated cupcake decoration. Attendees will see real-world examples that showcase the power of open systems and shared development in a manufacturing context.



WEDNESDAY, 28 JULY 2:15 PM - 3:15 PM Back of Hall H

**Exhibitor Tech Talks
CCT International**

C3D: 5D and Beyond

CCT (the software arm of CCC International, a major EPC contractor) is a leader in the field of 5D construction. As a 3D-based visual framework for visualizing and controlling a construction-project life cycle, C3D is widely used on large construction projects to provide custom solutions for site engineers, project managers, control managers, and project owners.

In this talk, CCT introduces the concept of 5D construction and its applications to the construction market. The talk includes a demonstration of CCT's 5D generic framework and massive model-visualization engine featuring the highly interoperable HyperModel (US Patent 12/578,521), where solution providers and end users can create project semantics and workflows with dynamic links to the 3D model. Other module demonstrations include: the semantic-based InfoVis Engine, the massive Model Rendering Engine, the reporting engine, and the system-integration engine. The talk concludes with case studies and live demos.



WEDNESDAY, 28 JULY 2:30 PM - 3:30 PM Room 301 A

**Birds of a Feather
Computer Graphics for Simulation**

This session discusses CG techniques for simulation and simulation methodology for CG. Topics include VR, Scenegraphs, DEVS, OpenCL, 3D modeling, AI algorithms, agents, HLA, MMO's, HPC, and GPGPUs.



WEDNESDAY, 28 JULY 2:30 PM - 4:00 PM Room 507

**Birds of a Feather
Friends of the Art Institutes**

This session is for attendees who are interested in learning more and/or working with the Art Institutes. Students, alumni, and employers are always welcome!



WEDNESDAY, 28 JULY 2:30 PM - 3:30 PM Room 506

**Birds of a Feather
OpenColorIO**

OCIO is a new open-source project focused on color management for visual effects and animation. Come for a brief (informal) presentation and an open discussion with the developers.



WEDNESDAY, 28 JULY 3:30 PM - 4:30 PM Room 402 A

**Birds of a Feather
3D Printing for Art and Visualization**

3D printing enables novel artistic creations and visualizations for science, medicine, and engineering. We invite everyone who wants to learn about and apply 3D printing to art and visualization.



WEDNESDAY, 28 JULY 3:45 PM - 4:45 PM Back of Hall H

**Exhibitor Tech Talks
Web3D Consortium**

X3D: Delivering New Dimensions on the Web

X3D is the only open-standard (ISO), royalty-free file format and run-time player specification for 4D virtual environments. It remains the most robust and versatile open standard for implementation of high-integrity and highly capable 4D multimedia information spaces. With multiple encodings and API bindings, it is compatible with many web and industry technologies. The data-integration capacities and the rich set of componentized features are rapidly expanding X3D's value across applications, from mobile to AR, CAD, and medical.

This talk reviews the current state of the innovative X3D community of content and application developers, and their work to ensure interoperability, longevity, and ownership of your content. See the latest real-world

interactive 3D applications and find out how you can build and protect your content investment in this ever-changing competitive market.

Presented by Virginia Polytechnic Institute and State University, Bitmanagement, Fraunhofer Heinrich-Hertz-Institut, the Naval Postgraduate School, and others.



WEDNESDAY, 28 JULY 3:45 PM - 4:15 PM Room 151

**The Studio—Presentations
Dinner Party**

Among our everyday habits, having a meal is a banal routine. However, with tabletop technology and computer vision, a diner encounters a magical moment where imaginary creatures appear during the meal. Meaningless everyday gestures become meaningful when a participant touches the point of entry into a new world. Dinner Party (displayed in the SIGGRAPH 2010 Art Gallery: TouchPoint: Haptic Exchange Between Digits) provides an environment where people meet and interact with Lewis Carroll's Jabberwocky (1872), which describes creatures hiding in the shadows. The table becomes the interactive platform between the participant and the imaginary creatures that live in the shadows of the table setting.



WEDNESDAY, 28 JULY 3:45 PM - 5:45 PM Room 506

**Birds of a Feather
Leonardo Town Hall Meeting**

Town Hall meeting for members of the Leonardo community and other attendees interested in art-science interactions. Artists, scientists, technologists, educators, students, theorists, and others are welcome.



WEDNESDAY, 28 JULY 4:00 PM - 6:00 PM Room 301 B

**Birds of a Feather
California Educators**

This session is for public and private school educators preK-post graduate. We also welcome professionals who currently work with schools or are interested in doing so.



WEDNESDAY, 28 JULY 4:30 PM - 6:00 PM Room 301 A

**Birds of a Feather
GPU Ray Tracing**

Meet with GPU ray tracing practitioners, API creators, and researchers to discuss the successes and challenges of implementing and using ray tracing on GPUs. Questions and demos on laptops are encouraged.



WEDNESDAY, 28 JULY 4:30 PM - 5:30 PM Room 151

**The Studio—Presentations
The Good, the Bad, the Stop Motion**

The Chiodo Bros. candidly discuss their five decades as stop-motion producers, from the 8mm clay animated movies they made in the basement during the 1960s to the state-of-the-art, digitally captured stop-motion images of Hollywood movies today. They review the hopes and dreams, the disappointments and the triumphs of three kids who wanted to make movies in a time before how-to manuals. And they screen early home movies, behind-the-scenes photos, and never-seen-before footage.



WEDNESDAY, 28 JULY 5:15 PM - 7:15 PM Garden East/West - Wilshire Grand Los Angeles

**Birds of a Feather
OpenGL**

Learn more about OpenGL 4, the most widely adopted 2D/3D graphics API, from the ARB and leading OpenGL companies.



WEDNESDAY, 28 JULY 6:00 PM - 7:30 PM Salon C - JW Marriott

**Birds of a Feather
The 23rd Anniversary CG Show/SAKE Barrel Opening Party at SIGGRAPH 2010**

For attendees interested in the CG Show of Yoichiro Kawaguchi, an established Japanese CG artist, and those who want to reunite or socialize with other attendees.



WEDNESDAY, 28 JULY 6:00 PM - 9:00 PM Brunette Room - Standard Hotel Downtown

**Birds of a Feather
Blacks in Animation & VFX & Gaming**

Second annual SIGGRAPH meetup for the Blacks in Animation & Visual FX and Blacks in Gaming organizations.



WEDNESDAY, 28 JULY 6:00 PM - 7:30 PM Salon 3 - JW Marriott

**Birds of a Feather
Purdue University Reunion**

A reunion for attendees who are associated with Purdue University as alumni, faculty, or friends.



WEDNESDAY, 28 JULY 6:00 PM - 8:00 PM Room 408 AB

**SIGGRAPH Dailies!
SIGGRAPH Dailies!**

Watch the producers behind the pixels present images and short animations of extraordinary power and beauty, and tell their real-life production stories.



THURSDAY, 29 JULY 9:00 AM - 10:30 AM Room 402 A

**Birds of a Feather
CinemaDNG Initiative For Interoperability In Digital Cinema Capture**

Presenting CinemaDNG: an industry-wide initiative for an open, raw image format for digital cinematography. Capturing and editing camera raw video in a vendor-neutral, standard format.



THURSDAY, 29 JULY 9:00 AM - 1:00 PM Room 151

**Emerging Technologies
Emerging Technologies**

Interactive demonstrations of innovative technologies in a broad range of applications, including displays, robotics, input devices, and interaction techniques. Emerging Technologies includes a mix of works invited by the organizers and works selected from juried submissions. All the demos are available for attendees to try out and discuss with the creators.



THURSDAY, 29 JULY 9:00 AM - 12:00 PM Room 151

**The Studio–Workshops
CS5 Trickery & FX**

This hands-on workshop explores digital fine-art creation and perfection of the final print. Topics include digital creative techniques, how to optimize your imagery for successful final output, and the process of digital final printing.



THURSDAY, 29 JULY 9:00 AM - 10:30 AM Room 151

**The Studio–Presentations
Hi-Res Rapid Prototyping for Fine Metals and Jewelry**

How high-resolution prototyping is applied to creation of metalwork and jewelry.



THURSDAY, 29 JULY 9:00 AM - 10:30 AM Room 151

**The Studio–Presentations
Integrated Prototyping for Architectural Modeling**

An overview of techniques ranging from color Zcorp printing to laser cutting for production of large-scale architectural models.



THURSDAY, 29 JULY 9:00 AM - 3:30 PM West Lobby

**International Center
International Center**

The International Center offers bilingual tours of SIGGRAPH 2010 programs, informal translation services, and space for meetings, talks and demonstrations.



THURSDAY, 29 JULY 9:00 AM - 5:30 PM West Lobby

**Posters
Posters**

Observe graphic displays of incremental, preliminary, partial, and innovative insights that will shape the future of computer graphics and interactive techniques.



THURSDAY, 29 JULY 9:00 AM - 1:00 PM Outside Room 403 AB

**The Sandbox
The Sandbox**

Test drive current game-development technologies, explore game design, and play the games that are defining the next generation of digital interactivity.



THURSDAY, 29 JULY 9:00 AM - 1:00 PM Room 151

**The Studio
The Studio**

Collaborate in hands-on learning lab, where students, professionals, artists, scientists, engineers, and the latest technologies create surprising artworks and systems.



THURSDAY, 29 JULY 9:00 AM - 1:00 PM Room 151

**Art Gallery
TouchPoint: Haptic Exchange Between Digits**

The work exhibited in the SIGGRAPH 2010 Art Gallery investigates the polysensory nature of human experience in a technologically enhanced environment. The exhibition explores the permeable membrane of the techno-human interface, where we engage an array of tools to materialize and visualize artifacts of creative expression. Integral to the work is human haptic interaction, involving the "viewer" and/or the artist through a unique physical interface.



THURSDAY, 29 JULY 9:00 AM - 10:30 AM Room 301 B

**Birds of a Feather
Undergraduate Research Alliance**

The Undergraduate Research Alliance is a group of educators and students devoted to development and support of original undergraduate research. The Alliance is sponsored by the ACM SIGGRAPH Education Committee.



THURSDAY, 29 JULY 9:30 AM - 3:30 PM Hall H & J

**Exhibition
Exhibition**

The SIGGRAPH 2010 Exhibition is your best opportunity to explore this year's new software, hardware, and

services offered by vendors from throughout the world.



THURSDAY, 29 JULY 9:30 AM - 3:30 PM Hall K

Job Fair
Job Fair

Actively looking for a new job? Networking to see what opportunities are available? Interested in meeting with some great companies? The Job Fair is where SIGGRAPH 2010 attendees connect with employers before the conference, during the conference via the Job Fair, and after the conference via the CreativeHeads.net job board and candidate profiling system.



THURSDAY, 29 JULY 9:45 AM - 10:45 AM Back of Hall H

Exhibitor Tech Talks
Intel Corporation

Inspecting Complex Graphics Scenes in a Direct X Pipeline
Tweaking graphics for video games is a unique skill. As artists become increasingly technical, they need a better understanding of how their work runs on graphics hardware. Intel's Graphics Performance Analyzer is a tool that's designed to dive into frames, figure out the bottlenecks, and experiment with solutions. In this exploration of the modern requirements for graphics in video games, attendees learn how to analyze and tweak gameplay visuals for maximum performance and quality.



THURSDAY, 29 JULY 10:00 AM - 1:00 PM International Center, West Lobby

International Resources Events
SpaceTime Showcase

Digital review of projects accepted to the annual SpaceTime competition featuring the state of creative computer-based student work from around the globe.

Contact: Marc Barr, [mjbarr \(at\) mtsu.edu](mailto:mjbarr@mtsu.edu)



THURSDAY, 29 JULY 10:45 AM - 12:15 PM Room 151

The Studio—Presentations
Interactive Landscapes

Daan Roosegaarde, an artist working in Rotterdam, explores the dynamic relationships among architecture, people, and e-culture. In this talk, he shows his recent interactive public projects and travel images of Asian cities. And he explores important questions about future cities, where the virtual and real worlds will be even more connected: What will Facebook squares look like? How can we use media or other technology as agents

that shape our public space? How can we use them as social technologies? The urban reality around us will certainly keep on changing, but how will this become as natural to us as our cities are now?



THURSDAY, 29 JULY 1:00 PM - 3:00 PM Room 402 A

**Birds of a Feather
Mobile API**

Get the inside track on OpenGL ES, OpenVG, OpenMAX, and all the new-media APIs being used to develop the billion-dollar, billion-user gaming and mobile multimedia markets!



THURSDAY, 29 JULY 1:30 PM - 2:30 PM Room 506

**Birds of a Feather
Multiplex Content Consortium**

For attendees interested in "multiplex content" and applications of 3D stereoscopic technologies.



THURSDAY, 29 JULY 1:30 PM - 2:30 PM Room 301 B

**Birds of a Feather
Web3D Consortium Current Initiatives**

Come meet Web3D consortium members. Learn more about how you can contribute to Web3D Consortium's X3D specifications before public deployment. Hear about our current initiatives with W3C, OGC, and IMS standards organizations to build collaborative standards for geospatial applications, augmented reality, virtual worlds, and e-learning.



THURSDAY, 29 JULY 2:00 PM - 3:30 PM Theater 411

ACM Student Research Competition
ACM Student Research Competition

SIGGRAPH 2010 hosts an ACM Student Research Competition, which takes place in two stages. In the first stage, 25 student posters are selected for judging. At the conference, a panel of distinguished judges reviews these posters during the poster sessions and selects five semi-finalists. The semi-final poster authors have five minutes each to present their work to the judges. The three winners will present their work to SIGGRAPH 2010 attendees during the ACM SRC Final Presentation.

For students who are just beginning their research careers, this is an excellent opportunity to learn about the types of research their peers are pursuing. At the end of the presentations, the judges announce the winners, who go on to the nationwide ACM Student Research Competition.



THURSDAY, 29 JULY 2:00 PM - 2:30 PM Room 301 A

Birds of a Feather
Processing; The Solution to Introducing Freshmen in a Fine Arts Foundation Program to Digital Concepts

Samples of work done in Processing by freshmen in Foundation Studies at the Rhode Island School of Design and a brief discussion about our search for the best way to introduce freshman to digital thought.



THURSDAY, 29 JULY 3:00 PM - 6:00 PM Room 301 B

Birds of a Feather
Web3D Korea Chapter New Proposals Discussion Meeting

This session focuses on advancing the process of X3D standards proposals to include mobile, augmented reality, and eLearning functionality.



THURSDAY, 29 JULY 3:00 PM - 5:00 PM Room 301 A

Birds of a Feather
Agile in Production

A gathering to discuss agile project management methods in production environments. Are you interested in the latest concepts in lean and agile methodologies and how they could help your projects?



THURSDAY, 29 JULY 4:00 PM - 6:00 PM Room 402 A

Birds of a Feather
WebGL

WebGL is a cross-platform, royalty-free web standard based on OpenGL ES 2.0. WebGL is shader-based using GLSL, bringing plugin-free 3D to the web, directly into the browser.