It's the last day of Siggraph and the Exhibition floor is already packed up, an empty cavern with only scattering of Mardi Gras beads and the occasional advertising pen to show what was there only 24 hours ago. However, attendees are still hustling from class to class in numbers nearly as significant. Though the Exhibition floor was the smallest I've seen in years, a reflection of the economy, the classes were as stellar as ever and even today there were excellent ones to be found.
In a course called Computation & Cultural Heritage: Fundamentals and Applications, I was able to catch a few comments from Greg Downing and a session with Paul Debevec. A question from the audience to Downing referenced his demonstration on capturing the extremely large format high resolution imagery of Yosemite Park that was on display at Siggraph 2008. The question involved what interfaces were needed to deal with the massive amounts of data processing. His answer was that any mouse was adequate for zooming in to wherever the mouse was rather than the center of the image. Downing continued to explain how in moving to 3D it was a particular benefit. They have taken steps to bring the Yosemite Valley imagery into a real 3D model by importing it into a game engine and he believes that is when better interfaces will be important.

Paul Debevec from the University of Southern California Institute for Creative Technologies began his session discussed some of their projects in the area of cultural heritage. He has been working with the ways objects reflect light and how to best capture this information accurately for digital reproduction. Heritage architecture and in fact anything such as translucent or highly reflective objects that reflects light in odd ways has so far been difficult to capture. Debevec showed one example of a hundred year old American Indian headdress that was captured on one of his light stages with the ability to capture light from all directions. (I've stood in one of his light stages and...
it’s a pretty amazing experience.) The headdress is covered in feathers and trimmed with metal and even a mirror that was probably a trade with a settler or soldier, all items that can be particularly hard to scan for accurate textures sans shadows, and scanned shadows are the death of accuracy. His methods allow for such accuracy that these items reproduced in digital format can be correctly lit from any direction while maintaining an extreme level of true archival detail.

Ancient architecture with it’s centuries of weathering and discoloration can be particularly challenging.Debevec showed how he had captured the Parthenon in Greece and the statues that are currently on display in a museum in London, reuniting the enormous structure with it’s decorative sculptures and accurately reconstructing the building in it’s entirety in a digital model so realistic it was difficult to tell what image was recreated and what was original.

As for the promised follow-up to the Louisiana film tax incentive, here is a bit more information. The original incentive was passed ironically a few weeks before the Katrina disaster and of course under the circumstances was completely overlooked. The incentive was previously 20%, then stepped down to 10%. That now has been increased to 25% for the life of the project with an additional 10% for labor, and is permanent. The definition of what is included has also been expanded and encompasses video games, web applications, serious gaming (training, simulation, etc.) and film, and is applicable to larger studios and individuals alike. (NOTE: there are different equations for different production situations, too much to cover here, but they total between 25 and 35%.) Cost of living in Louisiana is quite low, far lower than other popular filming areas. Louisiana is the third largest filming location outside of New York and Los Angeles, with many related business such as catering and trucking already established, and making the incentives permanent and offers possibilities that are certainly worth considering.

Louisiana Digital
Louisiana Entertainment Council

Louisiana Digital
Louisiana Entertainment Council
Final Day of New Orleans SIGGRAPH 2009.

It seemed many people took advantage of the relatively 'cooler' morning to get back to the halls early today for a selection of courses, talks and screening in Real3D. I took in a viewing of the Trailers and Promos selection in 3D and was completely blown away. The Pixar short 'Partly Cloudy' was shown as well. Stunning work, hysterical story. If you want a belly laugh, this is it. Also watch for Lucas Martell's 'Pigeon Impossible.'

"Partly Cloudy" in 3D. Now that, is a do not miss short film.

Winners of FJORG!, the third annual 'iron-animator' style competition and GameJam!, the first videogame competition were announced last night.

Team Prestissimo won First Place, with Sasapitt Ruejirat, Phon Thiramonkol, and Lee Croydy. They were chosen as winners of FJORG! for their animated reel, 'Great Expectations'. Team Prestissimo was chosen from 10 three-member teams that competed for 32 non-stop hours to create character-driven animations under extreme pressure and multiple staged distractions. The team is from Thailand which means they traveled for the same length of time as it took to compete in FJORG!
Second place was the A.O.M. team [Christopher Monti, Linlin Si and Xuemei Song] from Rochester Institute of Technology, and Third was taken out by Team Riot [John Sabbath, Gayane Bagdasaryan and Shuang Chang] also from Rochester.

I took in the paper from Nicolas Holzschuch about a new way of calculating the single scattering of light in a refractive media. By using triangular mesh boundaries, Holzschuch showed how he could calculate the light pathways with dispersion contributions as well. "You can lose all the volume caustics if you don't handle the refractions correctly," he described. Both CPU and GPU results were shown.
The guys from StudioGPU showed off their MachStudio Pro 1.2 at the ATI booth yesterday and I wanted to ping them before we finished. The Software is bundled with an ATI FirePro V8750 accelerator card, but can be loaded onto NVIDIA hardware as well.

It's a bit like having a full render farm at your disposal with the results on screen as close to real-time as possible. Available as well is stereoscopic camera support.

Don Parker of Shotgun Software knocked me out with his latest iteration on the production tracking software. Some of you may know I love a good database. The extent to which this package can help a studio give solid reports, tracking charts and feedback on productions makes Shotgun a must-have tracker. From color codes, layers, frames and mocap points, through to editing and version tracking, this one deserves a second look.

Masa Inakage chatted to me at length this morning about the upcoming SIGGRAPH Asia 2009 in Yokohama. Inakage is the Chair of the conference, being held in Japan for the first time. "We came up with ideas to make sure that the Yokohama experience will be unique as a location for the conference, even for people who have been at SIGGRAPH conferences for a very long time," he said. "This is a unique opportunity to see a very different SIGGRAPH."

The SIGGRAPH Asia Diary will start on CGSociety very soon, to present information about the conference from as many different angles as possible. An extended interview with Masa Inakage will be a feature.

Related links:
SIGGRAPH Asia 2009
SIGGRAPH 2010
Pigeon Impossible
Shotgun Software
Today I had the opportunity to don 3D glasses and explore a bit of space, mummies, and human anatomy.

In A Journey From Outer to Inner Space: Scientific and Biomedical Stereoscopic Visualization, my first journey was to the final frontier. Robert Patterson from the Advanced Visualization Lab at NSCA talked about the creation of their example animation of the Big Bang to current day, condensed into a minute and a half in stereo 3D. He and presenter Donna Cox of NCSA and the University of Illinois talked about the use of Maya and other software's in the animation process.

They used Maya for rendering in a piece that traveled from beyond the Milky Way into a birthing star. One example showed interactively working with dynamically moving particles, a sub sample chunk of data they could choreograph. The scale as they were moving was encoded into the camera path and could be used as a curve to drive the stereo separation. The simple Maya camera rig was made with a single camera, an imported stereo camera rig, constraining it to the single camera, then set the film offset to do the image shift and animate the left and right eye as needed.
Delving into stereoscopic imagery for medical purposes, Richard Breiman from the University of California, San Francisco School of Medicine showed how stereo could help surgeons with medical procedures by many methods. Those included scanning the body with such accuracy that cadavers may never again be needed. Every body is different and each presents its own challenges and requires special considerations.

In the case of the full body scan, that data can be used in endless ways and the data is always available, where cadavers are much harder to come by and can only be used once. He gave an example of a broken pelvis. By using a scan, they could remove the femur, the ball from the socket, in the digital scan to view the injuries underneath and decide on the best course of action before ever touching the patient.

It was time to lighten the mood a bit, and perfect timing too because the winners of FJORG! were
about to be announced. Prior to announcing the FJORG! Winners, they announced the 2D Game winner which was Invasion of Zoltor. The 2D game best of show went to Falling for Siggraph. The 3D game was a collaborative completion, one game was created using the Panda 3D engine by competing individuals or groups that created assets for the game.

And the winners of FJORG! was a group whose name I have no idea how to spell, but it was something along the lines of "Fratisimo". Prizes ranged from 2010 Full Conference Siggraph passes to Wacom tablets to Ballistic books. The complete list of winners will be posted shortly.

The night ended with the FJORG! Winning team riding a Mardi Gras float led by a marching band and followed by nearly all the Siggraph attendees. With the winners tossing Mardi Gras beads from the float, we paraded and partied our way to the Siggraph Chapters party by the Mardi Gras museum where we wined and dined the night away.
After all the SIGGRAPH celebrations of last night, the sessions began right on time, with a good crowd sitting ready.

Over in Hall E3, I found Jim Hillen introducing a panel of artists including Robert Neuman. He was charged with coordinating double the work for the Disney crew for 2D and 3D versions of the characters for 'Bolt'. The tailoring crew from Pixar, up next, got under the clothes of the assorted 'Up' characters and showed there has room to move, even for a distorted CG film character like very-square Karl.

Meanwhile upstairs in the '3D to the Home: What could Possibly go Wrong?', Senior Vice President of Engineering at Sony Electronics and Exec VP of SMPTE Peter Ludé was giving the industry perspective of the market. Although there were plenty of standards, formats and delivery theories, his prognosis was: "Not until 2015 would there be a viable screen solution available to watch 3D without glasses."
I also went right up to the third floor to Emerging Technologies where The Biological Instrumentation which was sharing a room with several glass tubes, each ringing with harmonies and strands of hair. The Biological display showed a collection of mimosa plants, each connected by a network of tubes with compressed air. When the plants open their leaves, they signal loudly which triggers the system to run through the transfer of air, a little water and light. The plants are communicating with the machines.

Back into the sessions. Chris Landreth was discussing his new film 'The Spine', just down the hall. He talked about the tireless work done by the Canadian team and strangely real, while clearly CG creations being the emotive leads. "To create something clearly artificial, but with a whimsical, emotional, twisted is a paradox. In a way it's kind of an experiment," he said. The skin of the characters was finalized with mental ray and the use of Houdini to a finer degree only because he had a great team. Then we were treated to the screening followed by a short Q&A. Many psychological and marriage topics ensued. A very dark subject which Landreth has treated tremendously well.
Steve Duenes, the Graphics Director for the New York Times was today’s Keynote, and one of the highlights of the week. He gave a brilliant talk on the very short timelines involved, how they gathered the information needed for the graphics, how and why they set up the interactive graphics they way they do, when, where, and why colors were used to distinguish areas in the graphics to clarify readability. He discussed the wide array of tools used for the projects, Flash, Illustrator, Form-Z, Maya, Excel, Python, CSS, and even Adobe Dimension.

Showing many examples, he ran through a series of layouts, both 2D and interactive, and even one narrated animation that was pulled together by a game company on the Times behalf. When the session wrapped, hardly anyone left. Instead he was trapped in the middle of a large crowd who pummeled him with questions until he had to beg to leave for another engagement.
A moderate crowd has come to the NOLA SIGGRAPH.

On to the Jon Peddie luncheon who began by asking his panel of field experts, has the new visualization computing speed meant you are able to invite customers into realtime visualization sessions? Responses ranged from how faster turnover times resulted in the ability to make quicker decisions to parallel computing opening up a whole new range of possibilities. One point was how gaming is not just for kids anymore.

Distribution of the gaming platforms have several hundred million people in the world using the platforms and its establishing the way we interact with the computer, setting a level of experience, the visual quality, and the interactivity. Kids growing up will have the same expectation out of all their tools. There is a fundamental change that is going to occur in the next ten years as tools have to evolve to meet those expectations.

In another session, Pixar discussed how they created the cloud character in their latest short, Partly Cloudy. David Batte showed the difficulties of creating a translucent fluffy particle mass that could still emote facial expressions that were readable. After several experiments, they settled on a traditional articulated mesh that was animated, and in Maya they attached particle emitters to the surface, applied a turbulent animated noise field, then exported the particle sim back to the in-house software and attached a volume rendering shader that cast rays into the model, marches along the rays and samples a density function where each sample calculates the occlusion in the direction of the light.
Parties at the GNO Digital Media Alliance Event.

The night wrapped with a party thrown by the Louisiana and GNO Digital Media Alliance Event who has made permanent the tax break that went into effect just before the Katrina disaster. To a very enthusiastic crowd, they proudly announced how the tax break for digital production credit in New Orleans allowed for a 35% credit back.

Portraits at the GNO Digital Media Alliance Event.

Coupled with the broad variety of possibilities in the cultural diversity, architecture, etc, the reduced cost of living, and the sheer fun of living here, they hope to make New Orleans a hotspot for an upcoming film industry. We will have more to report by this weekend, so check back!

Related links:
SIGGRAPH 2009

Share This
Will Wright was in great form this morning at SIGGRAPH in New Orleans. Wright was working the room and the stage for a very visual, long awaited keynote. He spoke (rather fast) of the game industries' creation of products to influence user-perception. The diagrams he used were comical, thought-provoking and told of the lesser-known underbelly of research in the industry. He spoke about the immense research, engineering, art, manufacturing and merchandising of a product/media/game that going on, to make the consumer want to buy more of the same product/media/game. "All so the right chemical can be released into the brain," he quipped, "Basically we're all drug traffickers."

Wright inferred that some of the content being produced today was in danger of disappearing under the medium it was being played on. Watching a movie on a phone screen should be just as effective as when it is being shown on a high-resolution, 3D iMax presentation because the crux of the effect is when the reaction is inside your head, not the medium it's shown on.

"At the other end of the pipe is the effect of the content on neuro-transmitters in your brain," he said. "That's where we gain the real traction." Wright showed comparative charts that comically portrayed the true figures of the cause and effect of the many kinds of media forms and how they were interplaying this stange game with our minds. As time marches on, the effects are becoming easier to graph.

Within digital arts and VFX for entertainment, Wright pointed out the really exciting areas in the middle ground between captured reality and synthetic images. His was a memorable keynote. Dare I say it, it was a thinking man's 'Zero Punctuation'.
The SIGGRAPH trade show opened this morning, and I have to say it looked terrific! Not as huge as other SIGGRAPH floors, that's granted; but the announcements were thick and fast, and very important.

Among a suite of other engines, NVIDIA introduced the OptiX ray tracing engine at the start of the NOLA show. This is part of a suite of application acceleration engines for software developers. This is essentially for real-time ray tracing, but with parallel capabilities leveraging the GPU at real-time, this is a huge step forward.

This is a very fast moving arena to be in. Noted by the fact there were others, not necessarily in anyone's dust, showing their wares in a similar vein. Along the aisles were Chaos Software's GPU-based V-Ray Solution(#3119), the Caustic Graphics' CausticRT, the new raytracing graphics card and software platform. Check them out too. (#2026)

Tonight we stepped out for the now legendary CGTalk Meetup, this year set up at the Acme Oyster House. So good to meet everyone you only ever get the chance to type to. We heard heaps of stories, ate heaps of oysters, had a glass or two as well.
At the end of the night, we were all asked to leave.

All good fun, until we were all asked to leave [pictured] cos we were disturbing the residents on Bourbon Street. I do believe I'm beginning to acclimatise.

Related links:
SIGGRAPH 2009
NVIDIA @ SIGGRAPH
Caustic Graphics
Chaos Group @ SIGGRAPH
Caustic Graphics
Zero Punctuation

One of CGSociety's own held a place in the Posters Sessions. Saba Kawas (above) from Jordon is finishing her Masters in Design with a focus on Animation and International Media. Her
poster was on a hyper-learning interface developing navigation toolsets for virtual environments, specifically Cobalt. It's a virtual environment similar to Second Life, and the project is overseen by Duke University. Though Duke has a magnificent computer hardware backend, there was no front end design or content and it lacked hyper linking metaphors. Kawas proposed two main core concepts, the media explanation generator and contextualized hyper-linking.

Douglas Lanman from Brown University.

Another terrific Poster with Douglas Lanman from Brown University was working on a principle to extend Multi-Touch which allows you to track multiple points of contact to allow you to track depth. His project addressed the idea of manipulating the objects in 3D using visible wavelength optical technology where a lot of the current Multi-Touch is compasive resistive. It leverages some idea from computational photography and capturing light fields. His project takes a traditional LCD and pull out the spatial light modulating layer. He put a very large sensor slightly behind the LCD made with a diffuser and a camera. He then replaced the back light of the LCD with an array of LED’s. The result was something that could display and image as before, but gained the ability to capture imagery.

Lisa Blum from Fraunhofer Fit, Sankt Augustin, Germany.

Lisa Blum from Fraunhofer Fit, Sankt Augustin, Germany developed a prototype for underwater use which allows a user to see virtual objects underwater, such as coral, sand, and swimming fish. She would like to see this available in public swimming pools, for underwater computer games perhaps combined with physical sports, and as a base for professional divers who might need to visualize underwater construction.
Andrzej Czyzewski from the Gdansk University of Technology in Poland was the main author of a lip/mouse application that detects human mouth movements instead of using a mouse. It’s ideal for those with severe hand-motor disorders or those who are paralyzed, giving total control over the computer without touching anything.

I’ll admit it, half of this stuff was way over my head. OK, more than half. By now my brain hurt so I moved on to a nice easy panel (NOT!) called “Will GPUs Change the Face of Rendering CGI for Motion Pictures” Eric Enderton from NVIDIA talked about being in the parallel age now, where clock speeds are flat, computers are no longer getting faster, they are only getting wider, and they would only get faster by taking advantage of more cores, true for the CPU as well.

As Enderton put it, in the era of flat clock speeds, performance comes from parallelism and from that comes wise use of memory reads. “Like the earth, memory looks flat, but it isn’t” and in reference to how fast progress towards using the GPU for film is moving, “The brave will get there first and to the vector belong the spoils.”

Related links:
SIGGRAPH 2009
POSTERS
NVIDIA
Share This
The Getting a Job in CG for Entertainment: Visual Effects, Animation, and Games panel today was a popular choice. The 300-person crowd consisted of at least 90% recent graduates hankering for advice from Digital Domain, Double Negative, The Moving Picture Company, LucasArts, Sony Pictures Imageworks and others, on landing that job.

Each studio representative were quite upbeat, advising people to, "be specific, or we won't know what you want to do"; and invited everyone to go to the Job Fair tomorrow when the SIGGRAPH floor opens. A great quote was that specialty will get you there, and versatility will keep you there.

Another talk, Splashing in Pipelines, ran at the same time. A failure in cloning made me miss the first three sessions but I did catch the latter, an overview of the underground cave sequence in
Land of the Lost with Lucio Flores and David Horsley. Flores discussed techniques in Houdini for splitting over multiple machines, each working on a thin voxel layer, increasing the number of voxels they were able to process. This allowed for the output of just three fields for the entire simulation, the level set for the surface, the velocity field, and a grading of the level set. In-house software allowed them to stitch together the volumes. By using the velocity field they were able to create the foam particles.

Following up with 'Keeping a Job in VFX, CG and Games.'

A follow-up panel to Getting a Job was appropriately called Keeping a Job in CG for Entertainment: Visual Effects, Animation, and Games. A moderate audience gathered for this panel which started out with pretty basic information but soon enough dropped a few gems of advice. One discussion about sharing credit for the results where credit is due pointed out how there is no shame being seen in reflected light. Sharing credit or pointing out the contribution of coworkers not only builds strong ties with those around you but may impress your supervisors too.

A favorite question of mine that seems to stump the panel was, what is more important, integrity or loyalty? Though few ventured an answer, it was pretty much agreed that it simply depends on the situation. When it came to the benchmarks and placement of hires it came down to the quality of work, the years of experience, and the level of responsibility. But the one thing that is often seen amongst juniors and the "younger generation" is they don't give as much respect to experience, but the hiring supervisors are aware that experience is quite important because there simply hasn't been enough time invested to develop the overall skill sets needed. Too often there is a sort of bravado in first time hires that simply cannot compare to years of experience. At the same time, veterans need to keep up their skills, a necessity that is too often ignored. Online courses were considered to be terrific for foundation work and utilizing the learning editions offered now by so many software companies and training DVDs have proven invaluable.

Houses for Humanity volunteer build organized by the crew at TurboSquid.

While I’m chatting, I’d like to add in the great experience I had for the two days prior to Siggraph, namely working with a team of Siggraph attendee volunteers who joined TurboSquid, local to New Orleans, and Habitat for Humanity trying to rebuild the town after the Katrina disaster. It was pretty
extraordinary to see how the VFX community can come together to build practical housing just as well as they build computer models. I had an absolute blast working with everyone there and want to extend a handshake to all who joined in the effort, and to tip my hat to Andrew, the volunteer supervisor on the build, and his assistant Sarah who managed to take a crew of geeks, few who had ever swung a hammer, and pull it all together for such a noble cause. It was a tremendous honor to work along side with every single one of you. Please do stay in touch.

SIGGRAPH CAF Awards

Tuesday 04 August 2009 - 00:20AM
Paul Hellard

SIGGRAPH 2009 Computer Animation Festival Executive Producer Carlye Archibeque announced the Computer Animation Festival's Best of Show, Jury Honors, Student Prize, and Well Told Fable Prize recipients for SIGGRAPH 2009 late this afternoon.

“This year’s accepted films really overwhelmed us with the level of technical expertise and expert storytelling, which made the awards decision process extremely difficult,” Carlye Archibeque, SIGGRAPH 2009 Computer Animation Festival Executive Producer. “The winners not only exemplify what makes excellent animation today, but also provide a glimpse into the great things we have awaiting us in the future.”

Award and prize winners were chosen from hundreds of submissions from around the globe - presented by both professional studios and students alike. An expert panel of jury members selected the winners for exemplary use of computer-generated imagery, animation, and storytelling.

Since 1999, the SIGGRAPH Computer Animation Festival has been an official qualifying festival for the Academy of Motion Picture Arts and Sciences “Best Animated Short Film” Academy Award. The film "Oktapodi" became an Academy nominee in the Best Animated Short category after winning Best in Show in the SIGGRAPH 2008 Computer Animation Festival. For the second consecutive year, the Festival's screenings, panels, and production sessions are open to the public, allowing general audiences to get a glimpse behind the making of computer generated effects, visualizations, and animations that is rarely available. The winners are:
Jury Award Winner

**Dix**
BIF Production
The Mill
USA

Jury Honorable Mention

**Alma**
Rodrigo Blaas, Cecile Hokes
SPAIN

Student Prize Winner

**Project: Alpha**
Matthias Bjørnæs, Christian Munk S?rensen, Nicolaal Siothuus
The Animation Workshop
This morning after SIGGRAPH was opened by Ronen Barzel, the Annual and Bi-Annual Awards were given out to many of the architects of today’s VFX and CG industries. The Steven Anson Coons Award for Outstanding Creative Contributions to Computer Graphics went to Rob L. Cook of Pixar, who was the keynote speaker at last year’s successful SIGGRAPH Asia in Singapore.
Rob's history spans the length of research into the creation of many of animation's great characters from the Pixar mantle.

The Computer Graphics Achievement Award was awarded to Michael Kass, also of Pixar Animation Studios. Kass brought us interactive depth of field in CG. He introduced the ‘Wiggly Spline’ which made the oscillatory motion of stretch and squeeze a finely measurable effect.

Other prizes were the Significant New Researcher Award which went to Wojciech Matusik of Adobe, and the Distinguished Artist Award for Lifetime Achievement in Digital Art went to two artists, Lynn Hershman Leesom from the Uni of California at Davis and Roman Verostko from the Minneapolis College of Art for their individual services to the digital arts field.

The Jobs Panel began tightly, with a crowd of at least 90% recent graduates hankering for advice from Digital Domain, Double Negative, The Moving Picture Company, LucasArts, Sony Pictures Imageworks and others, on landing that job.

Each studio representative were quite upbeat, advising people to be specific, ‘or we won't know what you want to do’ and invited everyone to go to the Job Fair tomorrow when the SIGGRAPH floor opens. A great quote was that this speciality will get you there, and versitality will keep you there.

We were invited to along to the Autodesk press conference today to get the latest on their announcements at the show. There will be more about the big upgrades elsewhere but the overall sense is that Autodesk has shown some ‘added-value’ in their 2010 releases.

Autodesk has launched Mudbox 2010 with Photoshop layer support and easier integration with their suite via FBX format. They also launched Softimage 2010, (no longer called XSI) They have written FaceRobot into the mix, accelerated development of the GigaCore III threaded architecture,
as well as expanding the ICE environment.

Autodesk has also unveiled Motion Builder 2010, with Python scripting, Real time engine and wider interoperability with the extended family. There are new Connection Extensions for 3ds Max 2010 including multilayer OpenEXR file compatibility for transferring scripted data.

The Autodesk Entertainment Creation Suites.

Autodesk is also introducing the Autodesk Entertainment Creation Suites and the Autodesk Real-Time Animation Suites for commercial use. The company has also launched the Autodesk Education Suite for Entertainment Creation for postsecondary educators, and Autodesk Animation Academy 2010 for secondary schools. There will be better than a 35% saving on the full price of these units. What have we been saying? You should be either earning or learning.

Related links:
SIGGRAPH 2009
Autodesk @ SIGGRAPH

SIGGRAPH Sunday

Monday 03 August 2009 - 11:06AM
Paul Hellard

The CGSociety crew are here at SIGGRAPH to keep you updated on the best sessions and all the info as it arrives, but for now, there is a whole new city to discover.
Here is some of what we did to acclimatise before show-start.

Settling into the tempo of New Orleans is easy as long as you are able to take a step backwards as well. Dropping back a notch is necessary, even though this is to be the major CG and graphics conference on the planet. This is sauna-like territory, so actually settling back, is mandatory.

We walked down Tchoupitoulas Street looking for a place to eat on Saturday night and ran into a festival with the White Linen theme. I was wearing black polyster...
As the doors-open sign approaches for SIGG, I'm running into people in the lifts and streets around town. With every hour or so, there are more of them. Been catching up with faces all day here now, in some of the nicer places and some other establishments that although cagey, serve double-helpings of Louisiana culture where you cannot find anywhere else. Stumbled across Mulates, just a street from the Convention center, which is straight outta the film 'Big Fish'.

In New Orleans this time of year, it rains for 10 minutes during the day and is steamy for the rest.

I ventured over to Bourbon Street late last night. Interesting walk. 'Pat O'Brien's' is in the midst of a colorful bunch of establishments. I thought I was descending into the bowels of hell, but instead found a whole lot of SIGGRAPHers letting their hair down. Ain't so bad after all!

Anyways, the New Orleans SIGGRAPH show is about to begin. First up at 8:30am, I caught the first Cameras and Imaging session in Hall E1-2, but by my count, there were two other sessions
worth seeing as well. Patrick Lin, the Director of Photography of 'Up' from Pixar told of his team's use of the structured lens and framing rules of the Japanese masters like Akira Kurosawa and others. Use of the 50mm lens, lines, frames within frames, and the use of 'Same As' shots, to create a visual memory in the mind of the viewer as the story unfolds.

Upstairs in the La Nouvelle Orleans Ballroom, SIGGRAPH also jumped straight out of the starting box on Monday with a 'do not miss' Production Session about the 'Technique-ologies' of creating Benjamin Button. Ed Ulrich led the team from Digital Domain in a pretty full description of the creation, ageing and 'younging' of Brad Pitt for the role. Four years of R&D, many dead ends but ultimate cinematic success. More info soon.

New Orleans is admittedly a very different town to the one I visited as a young tacker. Those with a positive attitude are golden. And there's a lot of that going on at SIGGRAPH.

It's gonna be fine. Mighty fine.

Related links:
SIGGRAPH 2009

SIGGRAPH Programs

Wednesday 29 July 2009 - 19:39PM
Paul Hellard

The final version of the SIGGRAPH Programs are available now from the SIGGRAPH site, ...and here. These will bring further portability to the once thick tome produced for navigating thru the SIGG halls of sessions and stands. For convenient, easy navigation of the entire conference, SIGGRAPH 2009 provides three versions of the Final Program, organized by registration category, and here they are:
When ever another SIGGRAPH approaches, I find myself digging into SIGGRAPHs past, and have been also reading Michael Rubin's Droidmaker, about George Lucas and the digital revolution we have all become a part of.

In Chapter 11 of Droidmaker, Michael Rubin discusses the hiring of one of the key members of the original Pixar team. Loren Carpenter heard about Lucas' new computer braintrust that was starting at Lucasfilm in 1979, and he wanted to be a part. As an employee of Boeing, he spent his spare time putting together one of the pioneering uses of Mandelbrot's new fractal mathematics on computer graphics. "Would it make things look real?" Carpenter made a short film to demonstrate his new concept. It was called "Vol Libre," and he showed it to a packed house at SIGGRAPH 1980. He was hoping to attract the attention of Ed Catmull and Alvy Ray Smith, who everyone knew would be in attendance. They were. Loren was hired on the spot.
Loren Carpenter is still at Pixar -- the Chief Scientist.

Vol Libre from Loren Carpenter On Vimeo.

Loren is quoted as saying he made this film in 1979-80 to accompany a SIGGRAPH paper on how to synthesize fractal geometry with a computer. "It is the world's first fractal movie. It utilizes eight to ten different fractal generating algorithms. I used an antialiased version of this software to create the fractal planet in the Genesis Sequence of Star Trek II, the Wrath of Khan. These frames were computed on a VAX-11/780 at about 20-40 minutes each." Just a measure of how far we have come.

Thanks to Michael Rubin and Loren Carpenter for the link to this long lost, inspiring video.

Related links:
SIGGRAPH 2009
'Vol Libre' by Loren Carpenter
'DroidMaker' author Michael Rubin

SIGGRAPH Cheat Sheet
Friday 24 July 2009 - 17:17PM
Barbara Robertson
SIGGRAPH 2009
Monday, August 3 to Friday, August 7

MONDAY
Registration: 7:30-6:00

All Day (or mostly all day):

**FJORG!** Ten three-person teams of CG animators from Ringling College, RIT, anipark studio, Pratt, and The Monk Studio compete for 32 hours to produce the best character-driven animation. Rooms 255-257. (Full, CAF, Basic) 9am – midnight (and beyond).

**Geek Bar** - Plug in a headset and watch streaming video from the technical papers sessions, or hang out with your tribe and network. (Full) 9-6

**Course:** Wolfgang Engle of Rockstar Games and others teach advances in realtime rendering in 3D graphics and games. Part I, 8:30-12:15, Part II, 1:45-5:30. Hall E3. (Full)

During the Day (and into the night):

**8:00-10:15**


**Talk** – Killzone2, Global Game Jams, Spore. Rooms 260-262 (Full).

**8:30-10:15**

**Production Session** – Building Benjamin Button. La Nouvelle Orleans Ballroom. (Full, CAF)

**10:30-12:15**

**KEYNOTE** - Hear how Oscar winner Randy Thom, director of sound design at Skywalker Sound, uses sound to help tell stories. A rare opportunity. La Nouvelle Orleans Ballroom (Full, CAF, Basic)

**1:45-3:30**

**Talk** – Japan Media Arts. See the gorgeous Oscar winning short animated film and others. Rooms 271-273 (Full, CAF)

**Talk** - “Splashin' Pipelines.” Make water with Digital Domain, PDI/DreamWorks, and Rhythm &

Reels – Nominees, Visual Music 1. Check out all 13 nominees for SIGGRAPH jury awards, not just the ones shown in the Evening Theater. Plus, La Nouvelle Orleans Ballroom. (Full, CAF)

Award Talks – Winners of SIGGRAPH’s highest awards share their wisdom. (Full, Basic)

3:45-5:30
Talk – “Making it Move.” Disney, Pixar, EA, and DreamWorks fracture a hamster ball, float balloons, drive gameplay with physics, and build a blob for “Bolt,” “Up,” “FightNight4” and “Monsters vs Aliens.” Hall E-2. (Full)

Panel – “Keeping a Job in CG for Entertainment: Visual Effects, Animation & Games. Supervisors from Reel FX/Radium, Digital Domain, Sony Pictures Animation, Double Negative and Electronic Arts help you keep your skills up to date.

Reels – Visual Music 2. La Nouvelle Orleans Ballroom. (Full, CAF)

6:00-8:00
**Technical Papers Fast Forward - The scientists get one minute to convince the audience to attend their session later. It’s fast. It’s fun. Spend one hour here and you can tell everyone what’s happening next in computer graphics. Hall E1-2 (Full, CAF, Basic)

6:30-7:15
Reels – Visual Music Reels 1 & 2 (repeated) Rooms 271-273. (Full, CAF)

6:30-9:00
Screening and Awards - Evening Theater. Watch Juried and Curated Reels for many top entries in the Computer Animation Festival plus live demos of outstanding real-time work. But first, SIGGRAPH announces the award winners. (6:30 Realtime, 7:00 Juried, 8:00 Curated) La Nouvelle Ballroom. (Full, CAF)

TUESDAY
Registration: 8:00-6:00

All Day (or mostly all day):

Exhibition – The trade show floor is open from 9:30-6. (Full, CAF, Basic)

Job Fair – Check out job postings, get tips, meet recruiters. Before the show, go to creativeheads.net to see which companies are recruiting for what so you’ll be ready. (Full, CAF, Basic)

FJORG! Ten three-person teams of CG animators from Ringling College, RIT, anipark studio, Pratt, and The Monk Studio compete for 32 hours to produce the best character-driven animation. Rooms 255-257 Midnight to 5pm. (Full, CAF, Basic)

Geek Bar - Plug in a headset and watch streaming video from the technical papers sessions, or hang out with your tribe and network. (Full) 9-6

Exhibitor Tech Talks: GPU, CPU, API with AMD 9:45 to 11:30, Intel 1-2:30, RapidMind 3:30 to 5:30. Hall F. (Basic, Full, CAF)

During the Day (and into the night):

8:30-10:15
Course – Realtime (GPU-based) global illumination. Auditorium C. (Full)

9:20-10:15
Panel – Building Digital Cities. Modeling, simulation, and visualization experts showcases examples
of advanced digital city models. Rooms 271-273 (Full, CAF)

**KEYNOTE** - The amazing Will Wright will play with your perceptions. The biggest “don’t miss” of the show. Go early to get a good seat. La Nouvelle Orleans Ballroom. (Full, CAF, Basic)

**Technical Paper** – Perception and Depiction. Light warping to enhance surfaces, an interface for lighting design by novice users, color perception under extended luminance levels, determining how well line drawings depict shape. Hall E 1-2. (Full)

**1:30-3:30**
**Reception** – Celebrating the special Leonardo issue and the art and design galleries. Lobby outside Rooms 363-365. (Full, Basic)

**1:45-3:30**
**Panel** – Will GPUs Change the Face of Rendering CGI for Motion Pictures? Take No Prisoners moderator Evan Hirsch handles panelists from NVIDIA and AMD. Check out the action in Rooms 260-262. (Full, CAF)

**1:45-5:30**
**Course** – An Introduction to Shader-Based OpenGL programming. Auditorium B. (Full, CAF, Basic)

**Course** – Color Imaging – understanding the science of color. Auditorium C. (Full)


**3:45-5:30**
**Talk** – Making Pixar’s Partly Cloudy. Spend an hour and a half with the wonderful Peter Sohn who directed this short animated film. You’ll be happy you did. Hall E 1-2. (Full, CAF)

**3:45-6:00**

**6:00-8:00**
**Music** – Pandeiro Funk. Experiments on rhythm-based interaction. Room 243-245. (Full, CAF, Basic).

**6:15-8:00**
**Talk** – Taking Care of Your Pets. First, though, you must make them. Kevin the bird in Pixar’s “Up,” Rhino the hamster in Disney’s “Bolt, Alpha the dog in Pixar’s “Up,” and a herd of cattle created by Rising Sun for “Australia.” Hall E 1-2. (Full)

**6:30-9:00**
**Screening** - Evening Theater. Juried and Curated Reels of the top entries in the Computer Animation Festival plus live demos of outstanding real-time work. (6:30 Realtime, 7:00 Curated, 8:00 Juried) La Nouvelle Ballroom. (Full, CAF)

**WEDNESDAY**

**Registration:** 8:00-6:00

**All Day** (or mostly all day):

**Exhibition** – The trade show floor is open from 9:30-6. (Full, CAF, Basic)

**Job Fair** – Check out job postings, get tips, meet recruiters. Before the show, go to creativeheads.net to see which companies are recruiting for what so you’ll be ready. (Full, CAF, Basic)

**Geek Bar** - Plug in a headset and watch streaming video from the technical papers sessions, or hang out with your tribe and network. (Full) 9-6

**Exhibitor Tech Talk** – NVIDIA, all day. GPU-8:30, stereo 9:45, atmos 11:00, CUDA 1:30, ray tracing with CUDA-2:45, Scene Graph 4:00. Room 294. (Full, CAF, Basic)

**During the Day** (and into the night):

8:30-10:15  
**Talk** – Painterly Lighting. Beautiful non-photorealistic effects used by Disney for "Bolt," polygonal painting from First Pacific Media, smooth subsurface scattering from Rhythm & Hues, and rendered, hand-painted area lights from Double Fine Productions. Auditorium B. (Full)

**Production Session** - Big, Fast and Cool: Making the Art for Fight Night 4 & Gears of War 2. La Nouvelle Orleans Ballroom. (Full, CAF)

**Course** – Build your Own 3D Scanner. Room 260-262 (Full)

9:45-11:30  
**Exhibitor Tech Talk** – Craft Animations shows you how to rig an environment and animate in realtime. (Full, CAF, Basic)

10:30-12:15  
**Panel** – Sound and Story. Lorne Lanning, Paul Lipson, Brian Schmidt discuss and debate the role of sound in storytelling. Room 243-245. (Full)

**Talk** – From Pitchvis to Postvis: Integrating Visualization into the Production Pipeline. Steve Sullivan, head of R&D at ILM; Rick Sayre, Pixar uber wizard; vfx supe Rob Bredow from Imageworks; Matt Aitken, vfx supe at Weta, and Justin Denton from Halon. Moderated by moi and I promise time for audience Q&A. Be there. Room 271-273  (Full, CAF)

1:00-2:30  
**Exhibitor Tech Talk** – Fun using Maya's using nParticles, nCloth, and Paint Effects with inventor Duncan Brinsmead. (Full, CAF, Basic)

1:45-3:30  
**Panel** - Instigating Change: Models for Positive Games. Title says it all – why kill if you can build instead? Auditorium B. (Full)

**Talk** - Two Bolts and a Button. Digital Domain reveals their HDRI lighting technique for Benjamin Button. Disney shows their techniques for using point clouds to illuminate environments and a compositing solution for art-directing refracted hair. It's all about light. Hall E 1-2. (Full)

**Talk** - Capture and Display. Geometry reconstruction for "Quantum of Solace" by Double Negative. Optical flow computations on facial expression scans, and estimating per-pixel specular roughness for isotropic BRDFs by Paul Debevec and IST. A visual tracking algorithm from ILM. It's full-on geek. Auditorium C (Full)

**Talk** - Immersive and Impressive Flow – Learn how thatgamecompany created this non-photorealistic PlayStation 3 game, one of the four chosen for the Evening Theater. Room 272-273

**Production Session** – Cloudy with a Chance of Meatballs": Making Mouthwatering 3D with Imageworks. La Nouvelle Orleans Ballroom. (Full, CAF)

1:45-5:30  
**Course** – Efficient Substitutes for Subdivision Surfaces with instructors from ILM, NVIDIA, Valve and the University of Florida. Auditorium A (Full)

3:45-5:30  
**Talk** - Animateering. Tired of keyframing? This is the talk for you. Auditorium C. (Full)

**Reels** – Real Time Live. Live demos of real-time rendering of trees, hair, turbulent cars, OLE, Medusa, and for Gears of War 2 and Split Second. La Nouvelle Orleans Ballroom (Full, CAF)

**Course** – Next Billion Cameras. Learn how to use bio-inspired processing to decompose sensed values into perceptually critical elements, imagine how online photo collections will transform visual social computing, and more. Auditorium B. (Full)

6:30-9:00  
**Screening** - Evening Theater. Juried and Curated Reels of the top entries in the Computer Animation Festival plus live demos of outstanding real-time work. (6:30 Realtime, 7:00 Juried, 8:00 Curated) La Nouvelle Ballroom. (Full, CAF)
Registration: 8:00-6:00

All Day (or mostly all day):

Exhibition – The trade show floor closes today. Open only from 9:30-3:30. (Full, CAF, Basic)

Job Fair – This is the last day for the job fair, too. Check out job postings, get tips, meet recruiters. Before the show, go to creativeheads.net to see which companies are recruiting for what so you’ll be ready. Open only from 10:00-1:00. (Full, CAF, Basic)

Geek Bar - Plug in a headset and watch streaming video from the technical papers sessions, or hang out with your tribe and network. 9-6 (Full)

During the Day (and into the night):

8:30-10:15
Panel – The Masters Speak: Game Developers Weigh in on True 3D Gaming. EA’s Habib Zargarpour, Nicolas Schultz of Crytek, and Andrew Oliver of Blitz get up early to look at 3D games in stereo. Room 271-273. (Full)

Panel – Deconstructing “Watchmen” with vfx masters DJ Desjardin, Bryan Hirota, Ben Cole, and Rob Bredow La Nouvelle Orleans Ballroom. (Full, CAF)

Games Paper - Kinesthetic Movement in Games I. Auditorium A. (Full)

9:15-10:00
GUEST SPEAKER - Pixar’s Bob Whitehill shows how stereo 3D can enhance visual storytelling with examples from Up, Toy Story and Toy Story 2. Rooms 260-262. (Full, CAF)

10:30-12:15
GUEST SPEAKER – Chris Landreth talks about “The Spine” and Psychologically Driven animation. Auditorium B. (Full, CAF)

Panel - Simulated Physics in Games with high-powered panelists from academia and industry. Auditorium C. (Full)

Panel – Biologic and Generative Fabrication – art to grow. Room 265-266. (Full)


Talk - Building Story in Games: No Cut Scenes Required. Real-time Rendering Chair Evan Hirsch leads a session with Danny Bilson from THQ and Bob Nicoll of EA. La Nouvelle Orleans Ballroom. (Full, CAF)

Technical Paper - Interacting with Hands, Eyes, and Images. Hand-tracking in real-time, making eye contact while teleconferencing, Ken Perlin & New York University Media Research lab’s UnMousePan – a multi-touch input device, and automating photo manipulation. Hall E3. (Full)

Production Session - Monsters vs Stereo: How Stereo Affected Production on “Monsters vs Aliens.” Room 260-262. (Full, CAF)

1:45-3:30
Production Session - G-Force 3D: Guinea Pigs, Gadgets, and Post-Production Stereoscopic Filmmaking. Room 260-262. (Full, CAF)

Course - The Digital Emily Project: Photoreal Facial Modeling and Animation. Check out latest research from Paul Debevec and Imagemetrics. Auditorium C. (Full)

Games Paper - Kinesthetic Movement in Games II. Auditorium B. (Full)

Panel – The Mass Animation Project: Learn how Yair Landau and the Mass Animation team and 58,000 + participants from 101 countries came together to create the largest global animation collaboration ever and what this means for the future of entertainment content creation. La Nouvelle Orleans Ballroom. (Full)
3:30-5:30
Talk - Capturing and Visualizing Animation. Automatically generate depth maps from hand-drawn images (Disney), procedurally and realistically deform the area around eyes (Disney), discover the minimum representation for creature motion (Texas A&M), and use passive optical motion capture to animate a small tree swaying in the wind (Brigham Young U). Auditorium C. (Full)

3:45-5:30
Reels – 2Cool4School. Tons ‘o Stuff: Rock Band II, Helboy, Watchmen, Scratch Me, Gorilla, Nine Inch Nails Ghosts 8, Cherries, iPlayer Penguins, much much more. La Nouvelle Orleans Ballroom (Full, CAF)

Production Session - "Coraline": The Changing Face of Animation. Rooms 260-262. (Full, CAF)

5:00-6:00
Merchandise – Last chance to collect merchandise from the SIGGRAPH pick-up center.

6:00-8:00
Awards - Fjorg & Game Jam Judging & Awards. Hall E1-2 (Full, CAF, Basic)

6:30-9:00
Screening - 3D Clip and Trailer Screening. Trailers and short films. Rooms 271-273. (Full, CAF)

Screening - Evening Theater. Juried and Curated Reels of the top entries in the Computer Animation Festival plus live demos of outstanding real-time work. (6:30 realtime, 7:00 Curated, 8:00 Juried) La Nouvelle Ballroom. (Full, CAF)

7:00-9:00
Stereo 3D Screening – Coraline. Rooms 260-262 (Full, CAF)

8:00-10:00
Reception – Party Time! (Full)

FRIDAY
Registration 8:00-3:30

All Day (or mostly all day):

Geek Bar - Plug in a headset and watch streaming video from the technical papers sessions, or hang out with your tribe and network. (Full) 9-6

During the Day

8:30-10:15
Reels: Digital Schoolhouse – Watch short films and excerpts of longer films, curated and juried, ranging from "Benjamin Button" to atherosclerosis, and from the Emily project to an animation of the replication of HIV. La Nouvelle Orleans Ballroom. (Full, CAF)

Course – Realistic Human Body Movement for Emotional Expression with Ken Perlin, Carol O’Sullivan and Aaron Hertzmann. Auditorium B. (Full)

10-11:30
Stereo 3D – Clips Room 260-262. (Full, CAF)

10:30-12:15
Awards – Posters. The finalists in the ACM Student Research Competition present their work to the SIGGRAPH 2009 audience and receive their prizes. Rooms 265-266 (Full, CAF, Basic)

Reels: The Underneath – More films! Twisted murder, Greed, Hit and Run, World of Warcraft. You get the picture. La Nouvelle Orleans Ballroom. (Full, CAF)

11:30-12:15
Stereo 3D: Pixar’s Tokyo Mater in 3D. Rooms 260-262 (Full, CAF)

1:45-3:45
Reels: Jury Chair’s Reel, Festival Chair’s Reel. La Nouvelle Orleans Ballroom. (Full, CAF)

Awards – SpeedLab. Auditorium B (Full, Basic)

Stereo 3D Screening: Cloudy with a Chance of Meatballs – excerpts. Rooms 260-262. (Full, CAF)

3:45-5:30
Talk – Character Animation and Rigging with Rhythm & Hues, École de technologie supérieure, UCLA, and the University of Surrey. Hall E 3. (Full)

Talk – Rendering and Visualization. GigaVoxels for games, using CUDA for multi-layer depth peeling, CAD tools for constructing nanoscale three-dimensional shapes from DNA. Rooms 260-262 (Full)

THAT’S ALL FOLKS. STAY TUNED for the Daily Coverage from New Orleans!

Autodesk will be pumping at SIGGRAPH 2009 with several events such as Tech Talks and presentations on approaching film and game projects '9' and 'Warhammer Online: Age of Reckoning'. They will also offer the first full Virtual SIGGRAPH. This is an online event that has free MasterClasses, live video streaming from the Autodesk booth presentations (#2201) and others attractions as well. Hewlett Packard and Intel are assisting, as well as NVIDIA, Fusion I/O and Wacom, so it's sure to be huge.

Below is a list of just some of the interesting presentations set to go:

Computer Animation Festival, Urban Planning Talks
When: Tuesday, August 4, 8:30 a.m.-5:30 p.m. CDT
Where: Ernest N. Morial Convention Center, rooms 271-273
What: Chaired by Autodesk's Doug Eberhart, the Urban Planning Talks will feature four presentations from influential urban planning professionals, including Paul Patnode from the Environmental Simulation Center, Kevin Gilson from Parsons Brinckerhoff, Gay Knipper from the Louisiana Department of Transportation and Development, and Susan Piedmont-Palladino from Virginia Polytechnic Institute and State University.

'Fun with Maya' Tech Talk
When: Wednesday, August 5, 1 p.m. -2:30 p.m. CDT
Where: Ernest N. Morial Convention Center, Hall
What: Explore some of the more surprising behaviors of Autodesk Maya software dynamics with one of its creators, scientist, Duncan Brinsmead. Brinsmead will reveal inside tricks on using nParticles, nCloth and Paint Effects. Examples include crashing satellites, midway rides, plasma balls, pouring liquids, lava lamps, Martian moons, flying hordes of arrows, dynamic snakes and slimy worms. As a bonus, he will also teach a technique for creating reflection-based fractals in the mental ray renderer. This talk will have useful content for advanced Maya users, but it is also suitable for anyone with an interest in CG.

Project Showcase
When: August 4-6 during SIGGRAPH show hours  
Where: Ernest N. Morial Convention Center, Autodesk booth #2201  
What: Representatives from Sony Pictures Imageworks, Starz Animation, Psyop/Mass Market and Mythic Entertainment, an EA Studio, will offer daily presentations at the Autodesk booth. The talks will highlight how Autodesk's Digital Entertainment Creation solutions have been used to create recently released and upcoming entertainment projects: 'Cloudy with a Chance of Meatballs,' '9,' 'Warhammer Online: Age of Reckoning' and various commercials, such as Absolut 'Dissection,' Sprint 'Speedway' and the Computer Animation Festival opening animation." One-time bonus tracks on "G.I. Joe: The Rise of Cobra and 'The Spine' will also be offered by representatives from Frantic Films and Chris Landreth, respectively.

Sponsorships and Local Outreach
Autodesk is supporting several SIGGRAPH events, including FJORG!, GameJam!, The Studio activities and the SIGGRAPH Student Volunteer session. Autodesk's Jennifer Goldfinch will participate in a panel discussion at the Student Volunteer session - along with representatives from Microsoft, Digital Domain, EA and ILM - offering students job-finding tips and industry insight.

Product Demonstrations, Client Presentations and the "Fun with Maya" Tech Talk
The product demonstrations and client presentations offered at Autodesk's SIGGRAPH booth will be streamed live to the Virtual SIGGRAPH event site. Visitors can view the content live or watch scheduled reruns. Duncan Brinsmead's "Fun with Maya" Tech Talk will also be recorded and posted on the Virtual SIGGRAPH site.

Related links:
SIGGRAPH 2009
Autodesk at SIGG'09
AREA at SIGG'09
CAF Talks

SIGGRAPH Basics and Cheat Sheets

The Basics
Below is your dandy daily cheat sheet for some don't-miss events and super cool things to check out at SIGGRAPH. It's time to chill in the Big Easy. But first, the basics.

If you don't have a hotel reservation, the SIGGRAPH site has special rates, but you could also Google up any number of low-cost bed and breakfasts nearby. It's off-season in New Orleans.
Lonely Planet, for example, lists 135 hotels and hostels online starting at only US$40 a night.

The convention and the Computer Animation Festival are both at the Ernest M. Morial Convention Center right down on the Mississippi River in New Orleans. Fly into Louis Armstrong New Orleans International Airport, 11 miles west of the city.

Once there, ride the SIGGRAPH shuttles from your SIGGRAPH hotel. Or, take local transportation. You can buy "VisiTours" passes for unlimited public transit rides at Got It on the third floor in the Riverwalk Marketplace next to the Convention Center. (Check the NOTRA website for routes and info.) You could also rent a bicycle at Bicycle Michael's, near the French Quarter, where you should spend at least a little time jazzing up your visit with good eats, drinks, and dancing.

At the Convention Center, register on Sunday from 1 to 7pm, Monday 7:30 to 6pm, Tuesday, Wednesday, Thursday 8:00 to 6pm, or Friday 8 to 3:30pm.

**The price you pay:**
Prices below are the max – the full prices for non-members.

(Check the web site for deep discounts given to SIGGRAPH members, especially those currently unemployed, and for students.)

Full Conference Access: Admission to everything – the Reception, the Computer Animation Festival, papers, panels. You get it all, plus the Conference DVD: US$1,125 at the door.

Full One-Day Access: US$445 at the door. Includes everything except the Reception, conference DVD, and Computer Animation Festival. You can add the CAF for US$50 for one day, or get a special US$100 rate for all days.

Computer Animation Festival (CAF) Pass: Screenings, Panel Discussions, Awards Ceremony, the Hall of History, the Stereo 3D conference, Evening Theater, and more. US$200 anytime (US$175 with full Basic conference pass; US$100 with Full conference one-day pass).

One-Day CAF Pass: US$50 (includes the Evening Theater)


Basic One-Day Pass: US$45

**BR's DANDY DAILY SCHEDULE**

Skewed toward entertainment, but with a bit of geek, music, and other stuff peppering the stew.

Print it out. Put it in your Pocket.

**EVERY NIGHT**

Evening Theater – The Electronic Theater is back with a new name. Watch the Computer Animation Festival's juried and curated reels plus lagniappe! A live demo of outstanding real-time interactive games and other apps every night. 6:30-9:00. La Nouvelle Orleans Ballroom. (Full, CAF)

**ALL DAY, EVERY DAY**

Sandbox - Last year's separate symposium for gamers is a main part of the conference now. Explore a workshop area with instructors for game design, play games from the Realtime part of the Computer Animation Festival, and be inspired by an exhibit of innovative design and development. Room 334, Lobby. (Basic, Full)

The (gorilla) Studio – Artists, designers, scientists, technicians, professionals and novices mix it up in a digital kitchen filled with 2D, 3D, and 4D tools and toys. Draw, composite, model, scan, print, film, capture motion, stop motion, interact, and make music. Rooms 343-345. (Full, Basic)

Art Galleries - Eleven artists from 10 countries mix bits with biology to create singing strands of hair, touchy clouds and other fantastic forms and environments in BioLogic. Rooms 352-355. And, amazing structures that rival those we marveled at last year in Generative Fabrication. Rooms 356-357. (Full, Basic)

-- Art Gallery Panel: Thursday, 10:30-12:15. Room 265-266.

Emerging Technology – Wear a display, play with a baby robot and glowing voxels, cook graphic food, touch the digital world and feel it touch you back. Rooms 337 to 351. (Full, Basic)
Information Aesthetics Showcase – It’s all about data, seeing data, seeing what’s in data, seeing what it all means. Science, Informatics, Medicine. Rooms 274-277. (Full, Basic)

-- Panel: Monday, 3:45-5:30. Auditorium B.

Contests and Competitions – Teams of animators, game designers, research scientists, and anyone else can amp up their adrenalin and show off their skill sets. SIGGRAPH even has a contest for people who collect business cards. To play, look for the Contests & Competition tab on the website. If you just want to watch, the geeks are in Rooms 265-266, the animators and gamers are in Rooms 255-257, the young researchers’ posters are in the hallways, and the card collectors are everywhere.

-- Fjorg & Game Jam Judging & Awards: Thursday, 6:00-8:00. Hall E1-2 (Full, CAF, Basic)

-- SpeedLab Presentations: Friday, 1:45-3:30, Auditorium B (Full, Basic)

-- Research Challenge Results: Tuesday, 1:45-3:30, Rooms 265-266. (Full, Basic)

Believe me, there is more coming...

SIGGRAPH, Artistic and Technical!

Monday 20 July 2009 - 04:41AM
Barbara Robertson

Details of the SIGGRAPH Technical Papers and the Computer Animation Festival.

Last year SIGGRAPH gave the now 36-year-old celebration of CG through short films a new face by establishing the Computer Animation Festival (CAF) as a separate but equal part of the conference with screenings, talks, panels and other sessions. This year, the CAF has taken a little from the old and a little from the new and crafted a sparkling five-day event. As before, attendees can purchase a separate CAF pass for the entire five days or separate, less expensive, passes for individual days. A full pass includes the CAF, of course, too.

Once again, CAF includes a sub-fest on stereo 3D, with screenings, plus sessions on Thursday and some of Friday in rooms 260-262 and 271-273, all organized by Imageworks’ Rob Engle, who just finished working on the 3D version of ‘G-Force’.

So what changed? CAF executive producer Carlye Archibeque of LightStage brought back the sorely missed, prestigious Electronic Theater (renamed the Evening Theater) which highlights most of the best of the best, and bundled the ticket price into the one-day CAF pass as well as the full CAF pass. So, for the price of an Electronic Ticket a few years ago, you can now spend an entire
day at the festival.

The selected films shown each night at the Evening Theater include two screenings, each an hour long, to show selected Juried and Curated films. You can see all the nominees for awards Monday afternoon at 1:45. Then, if you attend the Monday night screening, you can be the first to learn which films won the awards.

The nominees for the Oscar-qualifying Best of Show award are: 'Engel zu Fuss' (Angel Afoot), a cartoon for children about an angel that joins a circus, created for television by Jakob Schuh and Sascha Unseld of Studio Soi in Germany. 'French Roast,' starring an upright businessman who can’t pay his bill in a fancy café, a story told largely without dialog by Fabrice O. Joubert of Pumpkin Factory/Bibo Films, a small animation studio near Paris. And, 'Silhouettes of Jazz,' a film by Dominik Käser, Martin-Sebastian Senn, Mario Deuss, Nilo J. Mitra, and Mark Pauly from Zürich, Switzerland that uses 3D sculpture to cast multiple 2D shadows that tell the story of the evolution of jazz.

Films from The Mill, National Taiwan University of Science and Technology, and Supinfocom Valenciennes compete for the prestigious jury award, also announced Monday night. The Mill’s 'Dix' explores obsessive behavior, Taiwan's 'Love Child' demonstrates visual capture software by constructing a new-born infant, and Supinfocom’s “Anima” imagines a city made of animal shapes.

In addition, SIGGRAPH will announce the winners of the Student Prize – either ’Dim Sum’ from Ringling (US), 'Incident at Tower 37' from Hampshire College (US), or 'Alpha' from The Animation Workshop (Denmark). Nominees for the WFT (Well Told Fable) Award include 'friends?' (Iceland), ‘Unbelievable Four (US), and ‘Fernet 1,882 ‘Mini Cab Company’ (Argentina).

Making Music, Making Cities
On Monday, the CAF looks at visual music during talks and screenings, and then jazzes the conference with music performances every night at 6:00 in Rooms 243-245 plus Wednesday and Thursday afternoons at 1:45. These performances are open to anyone with a full, CAF, or basic pass. Extended guitars, custom instruments, interactive electronics, music! Check out the instruments. Check out the sounds. Jam.

On Tuesday, the CAF concentrates on urban planning and architecture and many of those films along with other jury selections screen during the 2Cool4School session on Thursday at 3:45 and Friday at 8:30 for those with Full and CAF passes.

“I love short animation, but I wanted to take advantage of having a digital arts festival,” says Archibeque. “The digital tool has developed so far for these applications and I we are in New Orleans where urban planning is so important now. So, we tried to come up with sessions that link to what people in this area would be interested in and feature things that haven't been showcased before. We have one session with the Los Angeles department of transportation talking about building and rebuilding roads. I love urban planning and architectural visualizations. So, I did a special call for those.”

Technical Papers
Technical papers are one of the most important parts of SIGGRAPH, the underlying foundation, the algorithms that make the art possible. If you can understand what the papers accepted at SIGGRAPH say today, you'll know more about what kind of art you can make tomorrow.

This year, SIGGRAPH’s dozens of peer reviewers accepted 78 papers from the 439 submitted, about half from US universities with the rest split among industrial, European and Asian sources.
“The remarkable trends in this year’s papers program are the increases in papers in physically-based modeling and surface deformation,” says Thomas Funkhouser of Princeton University, who chaired the papers committee. “Physical models are used in almost every subfield of graphic including fluid simulation, character animation, soft tissue, fire simulation and surface modeling.

All of this brings the CG world closer and closer to the real world, in appearance and in motion. Bringing the two worlds closer in another way are papers advancing the art of interfacing with the digital world.

“The program has an exciting session of papers on human-computer interaction technologies,” Funkhouser says. “Including hand tracking and achieving eye contact in a teleconferencing system.” That session is Thursday at 10:30 for people with full conference passes.

You can also find papers this year describing an interactive simulation of surgical needle insertion and steering, ways to capture a 3mm barcode from two meters away, dark flash photography, and, appropriate for a SIGGRAPH held in a musical city, harmonic fluids.

And, you might also want to check out a session on creating natural variations, which includes procedural methods for generating trees, hair, crowds, and faces. (Wednesday, 3:45)

If you don’t speak calculus and don’t want to sit through a technical session you can barely understand, or don’t have a full conference pass, be sure, whatever you do, to catch the Fast Forward session. Here, the scientists have one minute to describe their work. It’s open to everyone. You’ll be amazed. And, entertained. It’s Monday at 6 in Hall E.

And, don’t forget…

The exhibition trade show and the exhibitors tech talks. You can spend time in user group meetings, watch demos, discover new software and hardware. It’s about the tools. We need the fracking tools! We need to know how they work, what they do, what they will be doing tomorrow and for that, be sure to also visit the Emerging Technology area.

And, don’t forget to save time to be inspired with artwork in all the galleries. Last years’ algorithmic designs were the hits of the show. This year, the Generative Fabrication galleries are open to those with full and basic conference passes on Monday through Friday in rooms 356-357, and the interactive, kinetic, BioLogic art every day in rooms 352-355.

Also open to those with full and basic passes are talks by this year’s award winners on Monday, at 1:45: Robert L. Cook, Vice President of Advanced Technology, Pixar Animation Studios; Steven A. Coons Award. Michael Kass, Senior Scientist, Pixar Animation Studios; Computer Graphics Achievement Award. Wojciech Matusik, Senior Research Scientist, Adobe Systems, Inc.; Significant New Researcher Award. Roman Verostko, Professor Emeritus, Minneapolis College of Art & Design and Lynn Hershman Leeson Professor Emeritus, UC Davis, Chair of Film Department, San Francisco Art Institute; The Distinguished Artist Award.

Where else could you improvise a week by riffing from a session with Oscar-winning sound designer Randy Thom to one with the remarkable Will Wright, creator of the Sims and Spore and
speaker extraordinaire? Or, move from a session on getting a job to watching the Oscar winning short animated film? Watch stereo 3D, watch a researcher create digital fire. Make music. Make art.

Studios and software developers keep their secrets all year long and then, as if they couldn't hold on one minute longer, they bring their best talent, best software, and best images to SIGGRAPH and tell all. The artists, the propeller heads, the managers, the vendors— all share their knowledge with the community during this incredible, week-long event. It happens only once a year and this year expect something special.

“In uncertain economic times like these it's more important than ever for the conference to provide our community with kind of experiences that teach and inspire and help people grow and connect in order to plant the seeds for the future,” says conference chair Ronen Barzel.

The next post will be the SIGGRAPH Cheat sheets. See you there!

Related links:
SIGGRAPH 2009
Technical Papers

Two weeks until SIGGRAPH

Friday 17 July 2009 - 23:46PM
Barbara Robertson

SIGGRAPH. The penultimate conference for CG artists, scientists, game developers, visual effects wizards, animators, architects, toolmakers, inventors, urban planners— anyone whose passion or career, both, either, involves computer graphics.

It’s the reward for a year’s hard work. The place where everyone in the tribe can mix it up whether they speak geek or French, art or engineering, games or architecture, science or cell phones. It’s like jazz and this year, SIGGRAPH is in New Orleans, so let the good times roll. The economic hurricane could spin attendance numbers the wrong way, but it hasn’t changed the quality of the content. In fact, this year, the content has expanded, pulling people in urban design and scientific visualization back into the community and giving gamers their due.

“I think this is going to be a great conference,” says Evan Hirsch, chair of realtime rendering. “We decided not to cut back. The people who make it to New Orleans will definitely have a great time. The quality is really high.”

Realtime Rendering
“I’ve gone to SIGGRAPH for years, and this year, I wanted to give the realtime guys a chance to have a way to show off their stuff alongside the best films,” continues Evan Hirsch. “Games are fully grown up now. They deserve a seat at the table. I wanted to have games included in a way that didn’t belittle the work.”

Each night, the Evening Theater (nee Electronic Theater) begins with a live demo of the top four interactive pieces selected and curated by the jury: Soka University’s DT4 Identify, EA Sports’ Fight Night Round 4, Froblins from AMD, and Flower from thatgamecompany. In addition, live presentations of the 10 other selections screen during the week. “If we had shown tapes, no one would know whether it was real or changed in post, so we’re presenting the work live during the Animation Festival,” Hirsch says.

Among the selections are scientific visualizations and realtime rendering of dynamic simulations. “We didn’t want to limit realtime graphics to games,” Hirsch says. “We wanted games to be a participant, but we didn’t want to exclude the realtime academic pieces from the festival. We wanted to have the best graphics on screen.”

Hirsch also organized a talk on building story in games (Thursday, 10:30) and one on Flower (Wednesday, 1:45), one of the evening selections created by students in the USC games program. “Flower is a refreshingly different interactive game,” Hirsch says. “It’s stunning.” And, for fans of Fight Night 4 and Gears of War 2 who can pry themselves out of bed in time, a production session on Wednesday at 8:30am.

“I’ve spent the last 15 years bending CG to do cool stuff in realtime,” Hirsch says. “That’s what motivated me to organize this. It speaks to my heart about doing great realtime graphics and storytelling. That’s my passion.”

**Back At Ya**

In New Orleans and parts nearby, people use the Cajun French / Louisiana Creole word lagniappe (lan yap), to describe something a little extra, an unexpected gift or bonus. In that spirit, SIGGRAPH is giving the community of New Orleans, which was hard hit by Hurricane Katrina not that long ago, lagniappe.

On the SIGGRAPH website and via iTunes, you can buy the Basin Street Records SIGGRAPH 2009 New Orleans Music Sampler and help support the Louis Armstrong Summer Jazz Camp. And, you can find out how to help SIGGRAPH establish a computer graphics lab for 50 students at the Algiers Technical Academy.

You can also sign up for something especially thoughtful that could make your experience at SIGGRAPH one you’ll remember for a very long time. On Wednesday, 50 students from the Algiers Technical Academy and from the New Orleans’ Center for Creative Arts, an arts conservatory for high school students, will be at SIGGRAPH and they need guides. SIGGRAPH will make sure that the mentored students have conference passes. All you do is bring a student with you for half a day, and share the love.

**Related links:**
SIGGRAPH 2009 Outreach
Share This
In Los Angeles last year, you may have seen the truly amazing Rabbit Holes Media images of 3D installations created by many immensely talented members of the community. One particular piece was the hero shot of the Computer Animation Festival; Meats Meier’s ‘Mother’ (above).

It has been announced that this same piece will travel to New Orleans for the conference, and will take its place once again as part of a very exciting show.

If you’re still deciding to make the trek to the Gulf state, remember the Early Bird period will expire on July 24. Check out the prices and the differences.
You still have time to register online and save. After 24 July, the cost of Full Conference Access, Full Conference One Day, and Basic Access passes will be full price.

Full Conference Access Pass on or before the 24 July for an ACM member will be US$1,025, for a non-member US$1,050 or for a student US$400.
You might choose to register on-site in New Orleans when you arrive, go to Hall F of the Ernest N. Morial Convention Center. The Full Conference Access Pass will be US$1,125 for ACM members, US$1,175 for non-members or US$450 for students, a rise of US$50.


Related links:
SIGGRAPH 2009
Register now!
Rabbit Holes Media

Thursday 16 July 2009 - 00:42AM
Paul Hellard
At 10:30am on Monday, 3 August, prior to Randy Thom’s keynote presentation in the La Nouvelle Orleans Ballroom, ACM SIGGRAPH will be honoring some very highly esteemed artists and technologists with awards.

Steven A. Coons Award
Robert L. Cook Vice President of Advanced Technology, Pixar Animation Studios

The Steven A. Coons Award is given in odd-numbered years to an individual to honor that person’s lifetime contribution to the field of computer graphics and interactive techniques. This year’s award is presented to Robert L. Cook for his foundational contributions to physically-based reflectance models and distribution ray tracing and his enduring work on behalf of the SIGGRAPH community.

Computer Graphics Achievement Award
Michael Kass Senior Scientist, Pixar Animation Studios

The Computer Graphics Achievement Award is given each year to recognize an individual for outstanding long-lasting achievements in computer graphics and interactive techniques. ACM SIGGRAPH is pleased to present this award to Michael Kass for his extensive and significant contributions to computer graphics, ranging from image processing to animation to modeling, and in particular for his use of optimization for physical simulation and image segmentation.

Significant New Researcher Award
Wojciech Matusik Senior Research Scientist, Adobe Systems, Inc.

The Significant New Researcher Award is awarded annually to a researcher who has made a recent significant contribution to the field of computer graphics and is new to the field. The intent is to recognize people very early in their career who have already made a notable contribution and are likely to make more. ACM SIGGRAPH is proud to recognize Wojciech Matusik, for his innovative work in data-driven material representations and systems for data acquisition and display.

The Distinguished Artist Award for Lifetime Achievement in Digital
Roman Verostko Professor Emeritus, Minneapolis College of Art & Design
Lynn Hershman Leeson Professor Emeritus, University of California – Davis Chair of Film Department, San Francisco Art Institute

The Distinguished Artist Award is awarded annually to an artist who has created a substantial and important body of work that significantly advances aesthetic content in the field of digital art. With this new award, ACM SIGGRAPH recognizes contributions of artists working with a wide range of artistic applications. The committee selected two artists for this initial year of the Distinguished Artist Award, which in subsequent years will normally be given to a single artist. ACM SIGGRAPH is pleased to honor both Roman Verostko, for his contributions to the aesthetics of algorithmic art, by fusing his knowledge of computer programming with a long engagement with diverse cultural traditions to produce masterful prints, and Lynn Hershman Leeson, for her paradigm-changing innovations in applying emergent media to visionary forms of creative expression with insightfully cultural discourse.
The **Computer Animation Festival** is in alignment with the conference theme this year: "Network Your Senses". Of course the theme is open to interpretation and the Executive Producer Chair of The Computer Animation Festival Caryle Archibeque chose to interpret it as a chance to show how the scientific and artistic sides of technology work to not only entertain and amuse people on a personal level, but also to assist and improve people's lives on a practical level. "The use of digital tools for structural and urban planning, which are seen as tending more toward aesthetics and cultural influence, has expanded to include the more scientific side of the coin: climate, terrain and sustainability," explains Archibeque. "Plus, there's 3D stereoscopic technology that is great fun at the movies, but also an increasingly important tool for the medical field."

While the tools themselves are built on the foundations of subjects that are explored in one area of the SIGGRAPH conference, the visual impact of the entertainment and education they provide can be seen as moving pictures on the Festival side of SIGGRAPH.

"So we're focused not only on the networking of groups of people on a project, but also the networking of tools from different fields that can give any one field a tool to improve its process and meet their goals. So medicine, architecture, and animated shorts can all benefit from current research so that they can be the best that they can be at doing their job – whether that is making a sick child laugh or tracking a disease in that same child."
“The gathering of films for the team this year has been the same as it always is: fun, hectic, and rewarding,” Archibeque says. “Visual Music, Real Time, Urban Planning and 3D were the focus of most of our outreach and we received some amazing work submitted in these categories as well as some great animations from students and professionals. We had a sub-committee volunteer from France, Sophie Revillard, who was given the sole assignment to reach out to the European and Middle Eastern film communities and schools. As a result we’re going to be showing a good amount of work from all kinds of different countries.”

Related links:
SIGGRAPH 2009
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GameJam!

Friday 26 June 2009 - 01:53AM
Paul Hellard

SIGGRAPH 2009 and Sandbox are hosting the first annual GameJam! in New Orleans!

“We wanted something that would introduce attendees to video game creation, and GameJam! is that opportunity,” explains Tina Ziemek, the GameJam! Chair, from the University of Utah. “Many attendees may be well versed in what it takes to create computer graphics for video games, but GameJam! will let them witness the entire process of game creation first hand. We hope that GameJam! will give attendees a greater appreciation for game design, and maybe it will even inspire some artists to consider working in video game development.”
The biggest challenge in planning GameJam! for Ziemek and her team was making certain participants could accomplish the task assigned to them in 24 hours. "Many competitions run longer than 24 hours, so we had to pay special attention to making the task challenging yet feasible." There was plenty of advice from the organizers of the older and experienced sidekick FJORGL!

GameJam! could count on expert guidance regarding the logistical issues of hosting a day-long competition. "These details range from ordering 15 gallons of coffee to having a quiet space for participants to rest and decompress," she said.

During GameJam! participants will take part in mini-competitions to compete for assets like texture, or ten minutes of internet time. What participants will have to do to win these competitions will only be revealed at the event. Attendees will also be able to watch the GameJammers create their characters, worlds, and gameplay via a live feed (monitors in the hallway will display participants desktops so the attendees can see the games as they are created).

The Prizes

Entrants will compete to win in a variety of categories, including:

- Best of Show - The best overall game. This game is fun, looks and sounds great, and utilizes the theme.
- Best Game Play - Regardless of how the game looks or uses the theme, this game is the most fun to play. Of all the entries, it has the best mechanics.
- Best Appearance - Best looking game. This is a combination of the quality of graphics, effects, and art direction.
- Best Sound Design - The game that makes the best use of audio and sound effects.
- Crowd Favorite - The game that earns the most votes from attendees.
- Epic Failure - The game that failed, in one way or another, while trying to do something new and novel. The failure can be that it is not fun, not finished, broken, etc. The important thing is that what was attempted was new, risky, and completely insane.

All GameJam! games will be showcased on Thursday in the Sandbox area. "SIGGRAPH attendees are invited to drop by, play a game and vote for their favorite GameJam! game," explains Ziemek. "The votes will be tallied to determine the crowd favorite prizes. Speaking of prizes, GameJam! and FJORGL! are teaming up to have a joint prize ceremony! The ceremony will highlight all of the FJORGL! animations as well as the GameJam! games. It will be a great way to honor all the hard work, and sleepless hours that occur during our competitions."

Related links:

GameJam!
SIGGRAPH 2009

Chris Landreth

Monday 22 June 2009 - 21:11PM
Paul Hellard
SIGGRAPH 2009 announces Academy Award winner Chris Landreth as a special guest speaker during this year’s renowned Computer Animation Festival.

Landreth will show his newest short film, *The Spine*, and share insights into the development, and psychologically-driven animation of the film’s characters during a special discussion held on Thursday, 6 August, 10:30 am - 12:15 pm, Auditorium B.

Landreth will discuss the unintended consequence of the "Uncanny Valley" - the "creepy" effect of making CGI characters too realistic - as well as how The Spine attempts to avoid this outcome. He will describe how his animators used a method acting approach to create movement in these characters including how they mimicked subtle gestures, ticks, and micro-expressions in faces and bodies. Highlights of how the film’s crew balanced realism and stylization to create characters who are "Uncanny", in a positive way will also be discussed.

“It is an honor to have Chris return to give back to the SIGGRAPH audience. He has a wonderful story to tell that should be applicable across multiple industry lines,” stated Carlye Archibeque, SIGGRAPH 2009 Computer Animation Festival Executive Producer. “Chris’ animation expertise, as well as his long-standing history with SIGGRAPH, specifically his participation in the Computer Animation Festival, offer a great example of the caliber of work showcased in this great venue and what is possible by showcasing your talents at SIGGRAPH.”

Landreth first received acclaim in 2004 at SIGGRAPH when his animated short, *Ryan*, won its Best of Show Award. The film’s story was based on the life of Ryan Larkin, a former animator who produced some of the most influential animated films of his time at the National Film Board of Canada. *Ryan* went on to receive an Academy Award for Best Animated Short later that year.

The Spine was produced by the National Film Board of Canada in association with Copperheart Animation and C.O.R.E. Digital Pictures, with the creative participation of Autodesk Canada CO. and Seneca College School of Communication Arts.

For SIGGRAPH 2009, the Computer Animation Festival introduces two new sections: Real-Time Rendering, devoted to work produced interactively in real time; and Visual Music, which includes music visualizations and other artworks that combine music and images into a captivating multi-sensory experience.

Please note as well: This Friday is the Deadline for Early Bird registrations for SIGGRAPH. Click here to register!
To reveal the technology and creativity behind current achievements in animation and visual effects, the Computer Animation Festival also presents Panels, Production Sessions, and Talks.

Related links:
SIGGRAPH 2009

SIGGRAPH 2009 Chair

Wednesday 17 June 2009 - 07:20AM
Paul Hellard

Ronen Barzel continues his overview of the SIGGRAPH 2009 conference. I asked him what it is like to have the show back in New Orleans.

SIGGRAPH 2000 and SIGGRAPH 1996 in New Orleans were great experiences, that's why we're so eager to be coming back again. And it's coming together great. Our hosts in New Orleans: the Convention Center, the hotels, the city bureaus, the local services--are very excited that we're coming and are really working with us to put it all together and to make it affordable for us and our attendees. Of course most of our focus is in the convention center, but we're also working to integrate and embed SIGGRAPH in the local ambience and culture. We've things that are still being planned and so it's too early to talk about.

Choosing the conference city is another thing that happens years in advance. SIGGRAPH was
actually one of the first large conferences to sign up to come to New Orleans after Katrina, (in early 2006). Because of our past history with New Orleans, we wanted to come back not just for ourselves, but also to give back and help in New Orleans’ recovery.

For those who may not know, the downtown area of New Orleans (including the convention center, French Quarter, and major hotels) these days is cleaner, safer, and has more restaurants and cultural activities than ever. We've had a lot of planning meetings in New Orleans over the past year or two years, and they've all been fantastic experiences.

That said, as most people do know, many of the outer areas of New Orleans still haven't recovered from Katrina, and have been doubtless hit hard by the current economic downturn. When a big event like SIGGRAPH comes to town, that in itself helps contribute to the city’s financial health. But there's more we can do and we're organizing several outreach efforts so that SIGGRAPH won't just pass through New Orleans, but will bring some benefit to the local community.

For example, we're building a computer graphics lab in a local high school, with equipment donated by Walt Disney Animation Studios, software donated from Autodesk and volunteer labor from our community. And we're working with local high schools to bring students to the conference at no charge. And we're creating opportunities for conference attendees to help. We will be seeking volunteer mentors to guide those high school students one-on-one and introduce them to SIGGRAPH and computer graphics. And we're creating opportunities for attendees to contribute to Tiptina’s Foundation, an organization that provides musical instruments to local schools. And there's something that people can do right now. Our website features a jukebox playing an album of some of New Orleans’ finest new music, put together by a local record company specially for SIGGRAPH -- you can listen free, or download it for $9.99 with all proceeds going to support the Louis "Satchmo" Armstrong Summer Jazz Camp for kids.

The economy
In volatile times like this, it's actually more important than ever to enable the members of the SIGGRAPH community to come together for mutual inspiration, knowledge exchange, and person-to-person networking -- in order to plant the seeds and chart the directions for new opportunities and growth.

So although of course we've had to push to find savings and efficiencies in the multitude of operations that go into putting together the conference, we've made sure that the savings and cutbacks we've had to do are all behind the scenes and won't affect the attendee experience. We're committed to really creating the most exciting innovative experience that we can. Those who come to SIGGRAPH 2009 will find the 'energy level' as high as ever (if not higher!).

Of course times are tough not just for SIGGRAPH, but unfortunately also for some members of our community. For those whom the current economic conditions have left unemployed, and who would therefore face financial difficulty in attending, we'll be offering an opportunity to register at a special discount rate.

And we're getting great support from New Orleans. For example many of our partner hotels have recently lowered their already-discounted SIGGRAPH rates, or have added extra complimentary services, for anyone who reserves a hotel room through the SIGGRAPH 2009 Travel Desk.

Computer Animation Festival
The Computer Animation Festival will continue in having its new format: it will have juried competition reels and also special curated reels, with everything shown on the big screen in our theater -- which this year is located right in the convention center. In addition there are special blocks of talks and presentations every day, plus behind-the-scenes 'production sessions' about some of this year’s blockbuster films.

Some specific themes: Last year had a very successful day devoted to stereoscopic 3D, and with even more 3D films being released, this year’s Festival will have another ‘3D day’ with talks and screenings focusing on the latest developments. Tying in with the the conference-wide Music theme, the Festival will have special screenings and talks of Visual Music: the art form that combines music with animation. And there will be a day focused on Real-Time Rendering, including the live demos and presentations that I mentioned earlier.

And of course the Evening Theater will be on this year, highlighting the jury’s picks for the best work. Each evening the Evening Theater will start with real-time demos, followed by a juried films reel and a curated films reel. But with an extra twist: there's so much to do at SIGGRAPH and in New Orleans that we want to give attendees extra flexibility in their schedule -- so the juried and curated reels will play in the opposite order each evening. That means that can see the whole show in one sitting as usual, or if they prefer they, can for example, come in for just the first reel or just the second reel on two consecutive nights. Like last year, we don't have tickets for specific days, any Festival or Full Conference attendee can go to whichever show fits their schedule.
Highlights
You can bet I'll be at the keynote talks, I'm very excited by all three of them (heck, I'll be introducing them. :) I'm also really eager to see the Real-Time Rendering jury picks, especially since this is the first time we're having that. With my background in physically-based modeling and animation production, I've got my eye on a few sessions that'll be talking about use of simulation by artists and in movies. I've got a personal tie-in to music as an amateur musician, so will try to get over to as many of those sessions that I can. Outside of sessions, I'll definitely be checking out the Information Aesthetics showcase. Also a sneak peek at what's coming in the Art & Design Galleries is looking pretty amazing, and I've heard great things about some of the Emerging Technology pieces.

Finally, of course the exhibit hall is always a 'must see'. It'll be a busy week!

Related links:
SIGGRAPH 2009
Computer Animation Festival Awards
Art & Design Galleries
Emerging Technologies

Welcome to the CGSociety SIGGRAPH Diary! We are opening the Diary this early to allow artists to get a thorough exploration of what will be a very different SIGGRAPH. Who better to lead the charge but the 2009 ACM SIGGRAPH Chair for the conference in New Orleans. CGSociety sits down with Ronen Barzel.

In this two-part interview, Barzel talks us through the many new and refreshed areas of interest at the long-awaited Louisiana conference.

SIGGRAPH 2009 is 'embracing', 'opening up' into new areas like Visual Computing, Sound and Music, and GameJam! We're not leaving behind the core areas of computer graphics and interactive techniques, nor all the elements that make SIGGRAPH great. But as technology and our understanding continue to advance, Computer Graphics interacts more and more with other fields and other senses, and so we want to make sure to open up to those. And the SIGGRAPH community is really like none other, with an amazing breadth of expertise that fuses science, art, and technology -- touching areas as diverse as perception, cognition, physics, mathematics, storytelling, acting, robotics, communication, education, society, and aesthetics. It seems clear that our community has a natural interest and curiosity in multidisciplinary crossovers. And we'd like to
reach out into other communities that haven’t traditionally been part of SIGGRAPH, but who would benefit from what we have to offer and whose presence and expertise would add to our richness and understanding.

**Music**

Music and Audio is a natural crossover area, on several counts. CG is at its core about making pictures, but a lot of the imagery that we create we use for communication that includes audio simultaneously with the visuals -- in particular, movies and games. And the people in the audience process the audio and video as a unified experience. So we think it makes sense to consider audio and the video together rather than as completely independent fields. Hitting that point home, Randy Thom, the multiple academy award winning sound designer, will give a Keynote Talk about how sound can be used as an integral part of storytelling, rather than tacked on as ‘sound effects’ at the end of the process. More generally, multi-mode communication and interaction are known to be potentially more effective than visual only -- but are still open areas of research and development. And the activities of creating and manipulating music and audio are themselves very fertile areas for research and development in interactive techniques. And of course, with SIGGRAPH 2009 taking place in New Orleans, highlighting music is a natural fit.

**Games**

Another area is Games. We’re working to bring the game production and academic communities into the SIGGRAPH community. The ‘Sandbox Symposium’ was created in 2006 in cooperation with ACM SIGGRAPH and IGDA (the International Game Developers Association) as an incubator for a community and focus on all aspects of gaming, from technology to critical theory. After several successful years, the leaders of Sandbox and SIGGRAPH agreed that the communities would mutually benefit by merging. And so we’ve merged! SIGGRAPH 2009 now includes the peer-reviewed papers published as the Sandbox Symposium proceedings, as well as courses and panel discussions, and ‘The Sandbox’ interactive area that will host an exhibit of independent games and workshops on game design. And, yes, we’re holding our first GameJam! competition -- similar to FJORG! (now in its third year) -- an intense competition in which selected teams will strive against each other and the clock to each develop a game in a 24-hour marathon session. Also we’re very excited to have Will Wright, the visionary creator of The Sims series of games and of Spore, give one of our three Keynote Talks.

**Real-Time Rendering**

Very closely related to games, another very exciting new element is Real-Time Rendering. The technology and artistry of what sorts of animation and imagery can be produced interactively in real time continues to advance, not only in games, but also in simulations and visualizations. We wanted to give recognition to the latest developments and best work, but the traditional recorded-reel format of the Computer Animation Festival was never a great fit: recorded reels emphasize ‘linear storytelling’ and imagery created frame by frame -- but interactive real-time rendered animation really shines only when the user controls the experience interactively. So we created a special program specifically for celebrating interactive works. The selected works will be demo’d live in a special real-time session of the Computer Animation Festival, and the jury’s top picks will be demo’d live as part of the Evening Theater. Plus, the works will be available in the Sandbox for attendees to interact with and experience on their own. And we’ll have special sessions and discussions with a real-time rendering focus.

**Aesthetics**

In a different direction, another great new area is the Information Aesthetics Showcase. The emerging field of Information Aesthetics strives towards effective communication of information, by combining data visualization and graphic design, often with novel interactive techniques -- these are all areas that are part of the core strengths of the SIGGRAPH community, so it’s a natural fit for us. So for SIGGRAPH 2009 we are putting together a juried showcase of the best new work in the field. And we’re also featuring a Keynote Talk by graphics director Steve Duenes, the leader of the team at New York Times that creates their amazing interactive information graphics -- widely recognized to be among the best in the world.

**Leonardo**

This year we have the addition of Art Papers and Leonardo to SIGGRAPH. We’re launching peer-reviewed Art Papers, that will be published as a special issue of Leonardo, The Journal of the International Society of the Arts, Sciences and Technology. And we’re having a more focused and selective Art Gallery, also documented in this issue of Leonardo. Together, these are steps towards raising digital art at SIGGRAPH to the same scholarly level as technical research has long been.

Please return to the SIGGRAPH Diary on Tuesday next week for the next update to this interview.

**Related links:**

SIGGRAPH 2009