DIMENSION

The Newsletter of the L.A. ACM/SIGGRAPH Chapter June 2000

LA SIGGRAPH

L.A. ACM/SIGGRAPH Presents
Tuesday, June 13th, 2000

An Evening with The Walt Disney Company

The Program

6:30-7:30 Social Hour
7:30-9:00 Program

The Location

The Academy of Motion Pictures, Arts and Sciences on Wilshire Blvd.

Fees/Registration

The event is free to L.A. ACM SIGGRAPH members and $10 for non-members. New members who sign up on-site and pay the $25 annual membership fee (checks or cash only) do not have to pay the $10 fee.

Directions

The Academy of Motion Picture Arts and Sciences is located at 8949 Wilshire Boulevard in Beverly Hills, between Almont and La Peer Drive.

Parking will be available at the Academy Building, once this is full, Free additional parking will also be available at 8920 Wilshire (enter from La Peer Drive or from the alley), and 9025 Wilshire (enter from Wetherly). Please take special notice of RESIDENT PARKING

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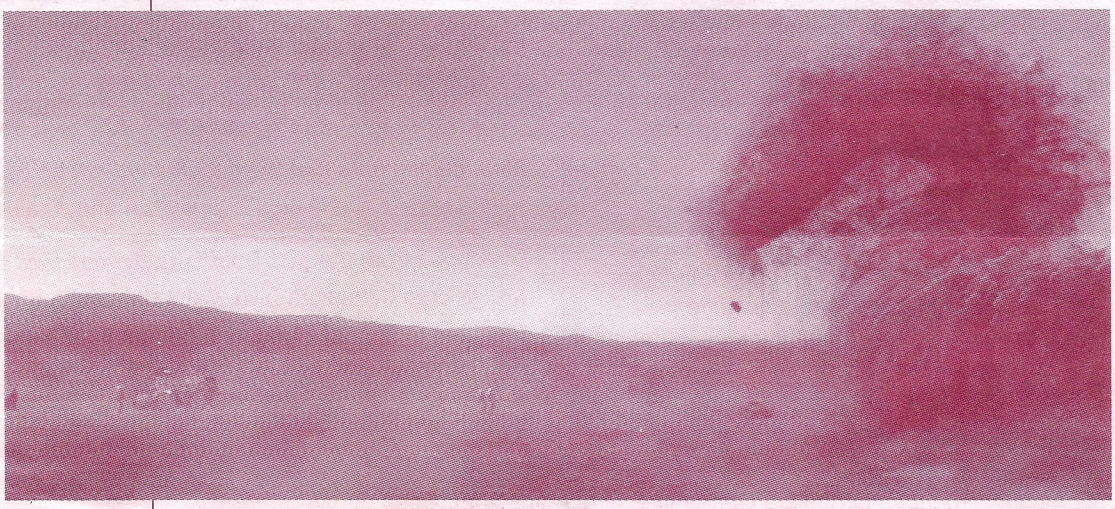
The Event

The L.A. SIGGRAPH chapter meeting on June 13th will be hosted by The Walt Disney Company. Walt Disney Feature Animation and The Secret Lab will show recent work from "Mission to Mars" and "Dinosaur." The Secret Lab is the recently created digital studio within Walt Disney Feature Animation.



Mission to Mars, © Touchstone Pictures

Mission to Mars

An expedition to Mars is destroyed by a monstrous vortex of dust and wind, a natural phenomenon with supernatural qualities. The Secret Lab was charged with the creation and animation of this primary character in "Mission to Mars" and investing it with a menacing and predatory nature. Their process began with conceptual art and animatics depicting vortex movements and suggesting a purposeful choreography, while also indicating flow, intensity, visibility, motion blur and wind direction. These computationally intensive shots were executed with "Hookah," the company's proprietary fluid dynamics simulator and volumetric renderer which was also used on "Armageddon."

Hoyt Yeatman, visual effects supervisor; Darin Hollings, digital effects supervisor; and Blaine Kennison, compositing supervisor, will provide a behind the scenes look at "Mission to Mars" from live action, bluescreen and motion control photography, model construction, Mars imaging and compositing to the creation of the vortex.

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"Walt Disney"

Dinosaur, © Walt Disney Pictures

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Dinosaur

Disney's "Dinosaur" represents a major advance for computer animation and is The Secret Lab's feature debut in this medium. The milestone project required the creation of a new production methodology combining traditional animation with live-action visual effects and the implementation of breakthrough techniques such as proprietary software for the creation of realistic fur, integrated muscle and skin systems, facial animation, interactive particle engines, and the innovative use of displacement maps as modeling tools.

When the "Dinosaur" team began making this film in 1994, they were faced with the task of designing and creating a full-length animated feature film with live-action background plates and photoreal computer generated characters. The immensity of the project in the initial stages was daunting. There were many possible avenues along the production path that made it difficult to foresee the perfect or best way through the maze. Each technical or artistic obstacle required a great deal of exploration. It was that exploration across all departments that enabled the team to create the imagery and technology for "Dinosaur."

One of the most important challenges faced by the software and production groups was the creation of a muscle and skin system. They needed to strike a balance between keeping the characters' motion true to how paleontologists thought dinosaurs would move while still moving them freely enough to keep them entertaining. This system was also key to giving the characters a sense of size and mass that otherwise would have been difficult to achieve. Much of the challenge of building the system was to make it as automatic as possible while still allowing the ability to make scene to scene and frame to frame adjustments

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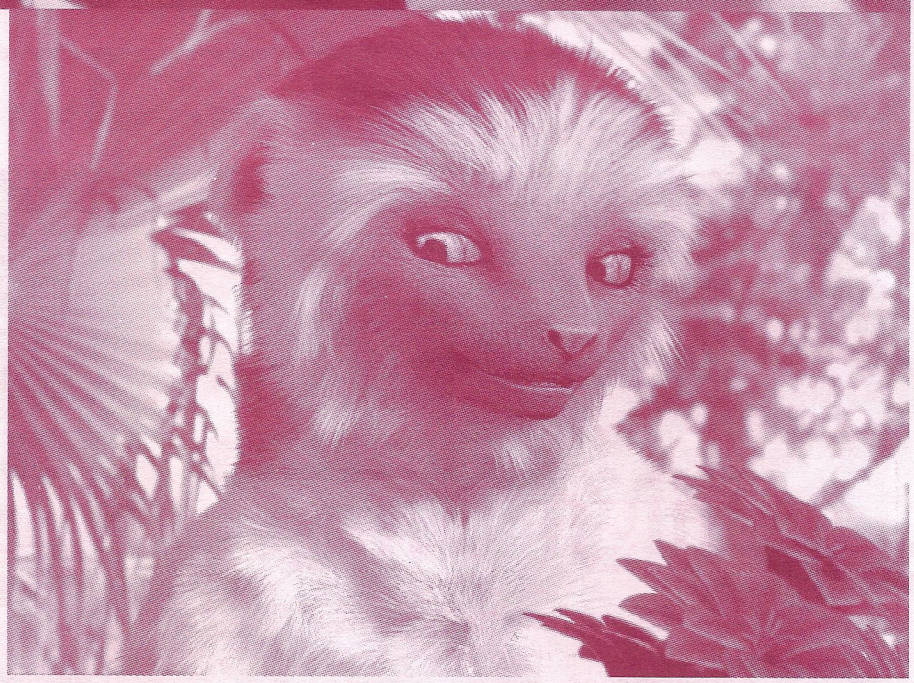
"Walt Disney"

to the original simulation.

The "Dinosaur" team started to address the challenge of facial animation during the model design and creation stages of "Dinosaur." While working with the animators to build the faces of the characters, they considered the range of motion necessary for the dinosaurs to have believeable dialogue. Join us as representatives from Walt Disney Feature Animation's The Secret Lab discuss the muscle, skin, and facial animation systems used in the creation of "Dinosaur."



Dinosaur, © Walt Disney Pictures

Speakers for Mission to Mars

Darin Hollings - Digital Effects Supervisor, Mission to Mars

As Digital Effects Supervisor on "Mission to Mars" Darin Hollings was responsible for all of the digital effects completed by Dream Quest Images (now known as The Secret Lab). He was instrumental in leveraging the company's proprietary atmospheric simulation software into the creation of the vortex. Darin was also Digital Effects Supervisor on Academy Award-nominated "Armageddon" (Best Visual Effects) and "Inspector Gadget." His other credits include "Flubber", "Deep Rising", "Con Air", "The Rock" and "Crimson Tide."

Darin holds a degree in Art with an emphasis in Graphic Design from San Diego State University. He began his career by working his way through college colorizing classic films from the priceless Turner archives just as the Mac became an accessible tool for technology. He worked for Steven Spielberg's Amblin doing digital ink and paint for animated feature "American Tale Part 2: Fievel Goes West" and was asked to spend the next year at Amblin's London -based operation, Amblimation, to work on "We're Back".

Blaine Kennison - Compositing Supervisor, Mission to Mars

After receiving a degree in Aerospace Engineering from UCLA, Blaine Kennison chose to pursue a more creative outlet for his technical and mathematical proficiencies. He began his career at Disney Feature Animation as a Technical Administrator on "Aladdin" and then joined Buena Vista Visual Effects as a Technical Administrator while also working in the scanning/recording department.

Blaine joined Dream Quest Images in 1993 and has enjoyed roles of increasing responsibility since then. After serving as Compositing Supervisor on almost 150 shots for Academy Award-nominated "Mighty Joe Young" and the Destruction of Paris shot for "Armageddon", Blaine was made Digital Effects Supervisor for MGM's "Stigmata." Most recently Blaine was Digital Compositing Supervisor on "Mission to Mars".

Hoyt Yeatman - Senior Visual Effects Supervisor, Mission to Mars

Hoyt Yeatman is a dynamic force behind The Secret Lab's innovative visual effects. He has contributed to the conception, design, supervision and production of special effects for more than 100 motion picture, television, and commercial projects. He was also one of the original founders of Dream Quest Images, an Academy Award-winning visual effects company.

Yeatman's conceptual and innovative approach to special visual effects embodies his commitment to high quality creative, technical and visual performance. He has always been drawn to the visually artistic and the technically complex and the

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challenge in blending these two worlds seamlessly.

His dramatic use of miniature and underwater bluescreen photography in the 1989 film "The Abyss" won Yeatman an Oscar for Best Achievement in Visual Effects. Yeatman was visual effects supervisor on "Mission to Mars". He was visual effects supervisor on Academy Award-nominated "Mighty Joe Young", as well as feature films "The Rock" and "Crimson Tide". In March 2000 Yeatman and the Eastman Kodak Company were honored with a Scientific and Technical Achievement Certificate from the Academy for their joint development of a new visual effects film stock, SFX 200T. Additionally, he has directed special attraction films for Warner Bros. Recreation, Sony Wonder, Imax Corp. and Samsung.

Yeatman attended UCLA where he studied animation and film. After receiving his Bachelor of Arts in 1977, Yeatman joined the effects crew of "Close Encounters of the Third Kind", an experience which springboarded him into work on the animation and special effects for NBC's Laugh-In specials, "Buck Rogers" and "Battlestar Galactica". Following this, Yeatman was recruited by the production team of Paramount Pictures for "Star Trek: The Motion Picture", the first of a series of highly successful films based on Gene Roddenberry's television series phenomenon "Star Trek." It was on this film that he and the co-founders of Dream Quest Imaages first met and planned the creation of their own visual effects company in 1979. Dream Quest was acquired by The Walt Disney Company in 1996.

Speakers for Dinosaur

Neil Eskuri - Digital Effects Supervisor, Dinosaur

Neil Eskuri joined Walt Disney Feature Animation in 1994 as a CG animator on the "Pines of Rome" segment of "Fantasia 2000." He also served as an animator and CGI lead on "Fantasia 2000's" "Beethoven's Fifth" segment. Before joining Disney, Eskuri spent two years at Sony Imageworks as a visual effects supervisor. In addition, he has worked as an animator and technical director for Rhythm & Hues, PDI, Metrolight Studios and Robert Abel & Associates. While at MetroLight, Eskuri was a member of the team that won a 1991 Academy Award for the film "Total Recall." His contributions to other projects have garnered an Emmy, a Monitor Award and three Clio Awards.