ACM SIGGRAPH VIDEO REVIEW



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DREAMSCAPES & MOUSEBRUSHES

01 Faux Plafond - Cosmic Promenade

Producer: Mikros Image

Summary:

On a night with a full moon, a couple who could not find sleep keep busy in their apartment. A domestic distraction and fantastic journey under a vault of stars....

Contributors:

Direction: François Vogel Production: Mikros Image Post-production: Mikros Image Operator: Pascal Laurent Music: Jèrùme Coulet Project manager: Michel Bultè Digital Artists: François Vogel, Anna Paula Pizzocaro Contact: Maryle Capmas Mikros Image 120, rue Danton Levallois Perret 92300 France + 33.1.55.63.11.00 + 33.1.55.63.11.01 fax maryle.capmas@mikrosimage.fr

02 Cycle

Producer: Nobuo Takahashi

Summary:

The objects in this film are a kind of metaphor for people who live

and work in the Tokyo area. These people are extremely busy, due to daily tedious and exhausting tasks. A sudden explosion sets them free for a while, but succeeding days are as oppressive as ever.

Contributors

: Hiroto Sasaki Contact: Nobuo Takahashi NAMCO Limited 1-1-32 Shin-Urashima-cho Kanagawa-ku Yokohama, Kanagawa 221-0031 Japan +81.45.461.8071 +81.45.461.8077 fax nobuo@vs.namco.co.jp

03 Calling

Producer: Tomoya Naruse

Summary:

An original and unique expression of 3D CG and photographic scanning using a pinhole camera, photoshop filters were applied to each frame and

repeated to express texture changes and subtle particle blurring in the sequence. The scanning process enables a soft glow that attenuates from the center to the edge of the picture. The image and soundscape were then linked together to become fantastic poetry of Japanese tastes and beauty.

Contact: Tomoya Naruse Tokyo Zokei University 5-18-3 Nakamachi Hoya-shi Tokyo 202-0013 Japan + 81.424.21.8749 + 81.424.21.8749 fax na8749@bd.mbn.or.jp

Contributors:

Iwao Haruguchi

04 Nebular

Producer: Yoichiro Kawaguchi

Summary:

This piece is a result of artistic impression and scientific reasoning. I wanted to explore the topological geography in a virtual universe using my self-organizing processes. The images of the Hubble Space Telescope look like amoeba, similar to the images of microscopic creatures, which inspired my new vision, including its new texture and developing process of the surface with viscosity and

gravity.

Contributors:

Naohiro Shichijo, Shinji Sasada, Tadashi Ichikawa, Shoichiro Iwasawa, Yasuichi Kitamura, Kumiko Kushiyama Contact:

Yoichiro Kawaguchi The University of Tokyo 4-6-1 Komaba Meguro-ku Tokyo 153-8904 Japan + 81.3.5453.5881 + 81.3.3467.0648 fax yoichiro@race.u-tokyo.ac.jp

05 Sunset

Producer: David Haxton

Summary:

Light emitting kinetic sculptures are seen in a museum setting. Other sculptural objects interact with the space in real and impossible situations. The function of the non-light emitting objects is to define the space as a solid form. At the same time these objects reveal (through use of intersecting surfaces) that the space is merely an illusion created in virtual

space. All of these events occur during a sunset. Both the sun and the light emitting objects define the space through light. Both key frame and dynamics were used in the animation process.

Contact: David Haxton 2036 Sharon Road Winter Park FL 32789 USA + 1.407.644.3421 + 1.407.644.1780 fax haxtond@aol.com

06 The Driven Key

Producer: Dan Bailey

Summary:

An animated study in mirrored symmetry.

Contributors:

Imaging Research Center, UMBC

Contact: Dan Bailey UMBC 1000 Hilltop Circle Fine Arts Building 111 Baltimore MD 21250 USA + 1.410.455.2163 + 1.410.455.1035 fax bailey@umbc.edu

07 Believer

Producer: Secret Sauce

Summary:

After Mimi Goese's record was completed, I sought to create a music-video for her song "Believer." Needing to achieve this quickly for promotional purposes, I devised a minimal piece based upon Animation-Sketches created in real-time using the mouse as a semi-dance-partner while the song played. These sketches contained the song-sync, lighting, movement, scaling, and dynamic information. I meticulously tweaked these spontaneous dance-sketches into something more precise. Information was copied.

referenced, and labored over to create lip-sync and complexity while retaining the dancespontaneity from the channel information.

Contributors:

Music: Mimi Goese Inspiration: Dwight Rider Contact: James Ellis Secret Sauce CalArts 24700 McBean Parkway Box BD-01 Valencia CA 91355 USA + 1.661.295.9397 jim@emsh.calarts.edu

08 Autumn Bamboo

Producer: Ching Clara Chan

Summary:

An animated Chinese ink brush painting. The style was achieved by applying procedural shaders on 3D models.

Contributors:

Thomas Moore

Contact: Ching Clara Chan Texas A&M University 805A Oran Circle Bryan TX 77801 USA + 1.409.268.9641 + 1.409.845.4491 fax clara@viz.tamu.edu

09 Dedale Ascetique aux Frasques Louanges

Producer: CNBDI LIN

Summary:

An object has something to say to us. It takes us back in time. A rift opens, enabling us to enter a dream.

Contributors:

Music: Eric Caillerez

Contact: Nicolas Billiotel CNBDI - LIN 121, rue de Bordeaux Angouleme 16000 France + 33.5.45.38.65.63 + 33.5.45.38.65.51 fax din@cnbdi.fr

10 Synchronicity

Producer: Tony Hurd

Summary:

"Synchronicity" is an entirely computer generated dance allegory. The passage of time, including the evolution of the characters, is augmented by a progression of stylistic looks. The complex choreography was captured using the Vicon 370 optical motion capture system. Nearly 100 markers were used to capture all of the subtleties of the performance. Vicon, Filmbox, Softimage and ILM software were used to reconstruct and apply the motion capture data to the CG dancers. The CG environment was constructed in Softimage, surfaced with RenderMan, lit with ILM proprietary software, and ultimately demolished using a Maya rigid body simulation.

Contributors:

Computer Graphics Supervisors: Tim Alexander, Jeremy Goldman, Hayden Landis, Sean Schur

Camera: Stefen Fangmeier

Digital Lighting Setup, Ending Sequence: Christian Foucher

Computer Graphics Artists: Mario Capellari, Paul Churchill, Mike Conte, Lindy De Quattro, Vince De Quattro, Jeff Ertl, Todd Fulford, Peg Hunter, Dan Lobl, Jennifer McKnew, Patrick Neary, Ricardo Ramos, Frederic Schmidt, Jeff Shank, Douglas James Smith, Ken Wesley

Digital Paint Artist: Patrick Jarvis

Digital Model Development and Construction Artists: Dugan Beach, Andrew Cawrse, Jim Doherty, Michael Easton, Aaron Ferguson, Paul Giacoppo, Rick Grandy, Paul Kavanagh, Corey Rosen, Susan Ross, Tony Sommers, James Tooley

Motion Capture Producer: Sandra Scott

Motion Capture Supervisors: Jeff Light, Mike Min

Film Recording Supervisor: Joshua Pines

Editor: Carey Burens

Negative Cutter: Doug Jones

Choreography: Paula Telander, Phyllis Cagnolatti

Dancers: Tanyce Alaga, Sheri Spellwomen

Original Musical Score: Jim Gardiner

Vocalist: Valerie Matthews

Production and Technical Support:

Michael Cordova, Tim Greenwood,

Ian McCamey, Janine McGraw,

Jim Milton, Mike Peters, Seth

Rosenthal, Mike Sanders Special Thanks: Industrial Light + Magic Contact: Hans Uhlig Bay Vista Productions 7 Sky Road Mill Valley CA 94941 USA + 1.415.448.2871 + 1.415.448.4768 fax hansu@ilm.com

NUTS & BOLTS

11 Young at Heart

Producer: Mark Sager, Lol Creme

Summary:

An old actress reminisces in her dressing room as she prepares to go on stage. All seems normal until she dramatically transforms into a young woman. How can she possibly do this? She is the world's first digital actress, so she can change into any form she likes! The film shows closeups of an actress who never existed performing in a standard dramatic context, demonstrating the Life F/X facial modeling, animation and performance capture system. Life F/X enables the creation of photorealistic facial animation of humans and creatures, and simulates complex skin deformation which allows digital makeup effects such as aging or youthening.

Contributors:

Directors of Life F/X Development: Dr. Mark Sager, Dr. Paul Charette Visual Effects Supervisor: David Altenau CG

Artists: Chris Waegner, Rudy Grossman, Olivier Sarda, Kevin Smith, David Altenau, Justine Sagar

Software Development: Shane Blackett, Stuart Norris, Dr. Richard Christie, Dr. David Bullivant, Dr. Paul Neilsen, Dr. Peter Hunter

Digital Tracking: Kieran Waegner, David Kalinoski, Brad Kalinoski,

James Shephard The Jester: Jessica Vallot Old Age Makeup Consultant: Todd Masters Director of Photography: Gale Tattersall Editor: Greg DeCamp Music: Lol Creme Contact: Mark Sagar Life F/X Inc. 2918 3rd Street, #3 Santa Monica CA 90405 USA + 1.323.769.3700 + 1.323.769.3701 fax massager@lifefx.com

12 Little Fluffy Clouds

Producer: Henrik Wann Jensen

Summary:

A simulation of light scattering in the atmosphere as a layer of clouds develops. The simulation includes a physically based sunlight model and it takes into account multiple scattering, global illumination, and spectral sampling.

Contact: Henrik Jensen Stanford Gates Computer Science, #362B Palo Alto CA 94305-4070 USA + 1.650.725.3696 + 1.650.723.0033 fax henrik@graphics.stanford.edu

13 Space Station Fly-Through

Producer: PricewaterhouseCoopers

Summary:

"Space Station Fly-Through" was featured in "Journey Into The Zone" but with an alternate ending and flight path. Three different 3D programs were used to create this sequence.

Contributors:

Storyboard, Art Direction: Carmen Roman 3D Animation, Programming: Mark Bamforth Sound: John Callifra Contact: Mark Bamforth PricewaterhouseCoopers 325 West 45th Street Apartment 203 New York NY 10036 USA + 1.212.596.5294 + 1.212.596.8958 fax Mark.Bamforth@US.PwCGlobal.com

14 Digital Galaxy Project

Producer: American Museum of Natural History

Summary:

This video is an excerpt from the inaugural show at the new Hayden Planetarium in New York City. It depicts only a portion of the full 21-meter digital dome projection. We begin with the real-time-rendered Milky Way, pulling out to reveal its neighboring, pre-rendered galaxies as outlying members of the Virgo Supercluster, the densest group in the filament that dominates this view drawn from Brent Tully's 3D catalog of 30,000 nearby galaxies. For still larger scales, we switch to Ostriker and Bode's gigaparsec dark-matter simulation, showing the universe as a foam of condensed filaments and knots surrounded by vast voids.

Contributors:

National Center for Supercomputing Applications: Donna Cox, Stuart Levy, Robert Patterson

American Museum of Natural History: Dennis Davidson, Carter Emmart, Erik Wesselak

Batwin+Robin Productions:

Michael Hoeschen, Robin Sylvestri Science Data: Digital Galaxy Project University of Hawaii: Brent Tully Princeton University: Jerimiah Ostriker, Paul Bode Real-Time Simulation Software:

Aechelon Technology

Contact:

Erik Wesselak American Museum of Natural History 79th Street at Central Park West 2nd Floor, Section 11B New York NY 10024 USA +1.212.769.5262 +1.212.496.3555 fax erik@amnh.org

15 Shapes of the Invisible: Butterfly

Producer: Altomedia

Summary:

A series of 22 scientific films provide an amazing dive into the heart of matter. For the very first time, we discover through a continuous forward zoom the microscopic structure of everyday things, astonishing and unexpected landscapes that lead

us to the atomic texture.

Contributors:

Cite des Sciences et de L'industrie, ex-Nihilo, Aune Productions Contact: Turkieh Gabriel Altmedia 19, rue Beranger Paris 75003 France + 33.1.42.77.77.72 + 33.1.42.77.77.73 fax altomail@worldnet.fr

16 EPS Process and Applications Video

Producer: Christopher Batty, Maria Spinella

Summary:

Three years ago, IOMEDIA created a simple animation for EPS to demonstrate their proprietary rubber recycling process to potential investors. The original video was so successful that EPS came back to IOMEDIA this year to have us create a new, updated video for them. Based on photographs, video and a trip to the original facility, IOMEDIA recreated the entire process using Softimage 3D. X ray passes were used to show the functionality of the machines. Depth of field was added using Adobe After Effects. In all, eight separate animation passes were composited together using Softimage DS.

Contributors:

Moneta Ho, Ildar Istarki, Steve Korian, Ben Kou, Marc Lafontant, Nobu Nakaguchi, Carla Pickering, Ben Pirt, Eric Rosemann, Damijan Saccio, Steven Wood, Cindy Yang, Peipei Yuan Contact: Maria Spinella IOMEDIA 126 Fifth Avenue Suite 804 New York NY 10011 USA +1.212.352.1115 x300 +1.212.352.1117 fax maria@io-media.com

17 UFO - Boeing JSF

Producer: Eileen O'Connor

Summary:

The images in this sequence are 100% CG. No plate photography was used or required for these shots. Terrain and sky backgrounds are either matte paintings or retouched satellite imagery used as texture maps. The Joint Strike Fighter and additional vehicles such as the KC-10 tanker and the USS Stennis aircraft carrier were modeled to exacting detail from blueprints and reference photos. Lighting of the Joint Strike Fighter was

achieved with a combination of off-the-shelf tools and in-house shaders. Digital humans were modeled and textured in LightWave and animated with a proprietary animation software program.

Contributors: Staff of Station X Studios Contact: Grant Viklund Station X Studios 1717 Stewart Street Santa Monica CA 90404 USA + 1.310.828.6460 + 1.310.828.4101 fax viklund@stationxstudios.com

18 Digital Muybridge -The Human Figures of Japan

Producer: Hiroshi Arita

Summary:

Muybridge once had recorded the motion of human and animals in multiple photographs. These chronophotographs are valuable works as both photo album and human database. "The Human Figures of Japan" is based on ergonomical somatometry data of 25 real Japanese men and

women. These virtual human figures are synthesized by 3D digitizing data, motion capture, and multiple angle photographic and video data.

Contributors:

Kyushu Institute of Design, General Asahi Co., Ltd., Information-Technology Promotion Agency Contact: Etsuo Genda Kyushu Institute of Design 4.9-1 Shiobaru Minamiku Fukuoka 815-8540 Japan + 81.92.553.4503 + 81.92.553.4503 fax genda@kyushu-id.ac.jp

DISTRACTIONS

19 The Longest Journey

Producer: Ragnar Turnquist

Summary:

"The Longest Journey," a computer game adventure set in parallel worlds of magic and science, features over 30 minutes of rendered video which is used to tell the story of April Ryan, a young woman with the ability to shift between twin realities.

Software: Kinetix 3D Studio MAX; Adobe Premiere, After Effects

Contributors:

Amanda Ronai, Renate Andersen, Christian Enger, Lars-Petter Anfinsen, Iwan Scheer, Rune Spaans, Oyvind Jernskau, Thorolf Tonjum, Kjetil Hjeldnes, Bjorn-Arve Lagim, Tor Linlokken Contact: Amanda Ronai Funcom Karenslyst Alle #5 Oslo 0277 Norway +47.22.92.59.56 +47.22.42.02.03 fax amandar@funcom.com

20 Stick Figures: A Virtual Concert

Producer: Wayne Lytle

Summary:

Self playing instruments perform a virtual concert. Procedural animation techniques were applied to automatically generate all instrument motion directly from the MIDI score with note/frame accuracy. These procedural animation algorithms are third-generation extensions of those used in Lytle's 1990 SIGGRAPH piece

"More Bells and Whistles."

Contributors:

David Crognale

Contact: Wayne Lytle Animusic 2 Greystone Drive Dryden NY 13053 USA +1.607.844.3848 wayne@animusic.com

21 ISS Pro Evolution

Producer: Makoto Toyama

Summary:

For this PlayStation game introduction, focus was placed on one player instead of many and on the close-up of four limbs instead of the entire player. Tightened muscles and muddy shoes in backlight are portrayed in detail. Boys from all over symbolize people's adoration of soccer. Vivid background colors are used, for soccer is a bright and powerful existence.

Team members worked separately on the modeling, painting, and animation. To maintain plan integrity, one person was in charge of the storyboard, layout, lighting, rendering, and editing.

Contributors:

Murazo, Tsuguo Tadano, Naomi Hara, Akira Yamaoka Contact: Aki Saito Konami Co., Ltd 1-4-30 Roppongi Minato-ku Tokyo 106-0032 Japan +81.3.5575.3456 +81.3.5575.3457 fax asaito@konami.co.jp

22 Chemical Brothers - Let Forever Be

Producer: Partizan Midi Minuit

Summary:

This music video was created in honor of the 1970s (kaleidoscope and mosaic effects) using camera rather than post effects. Shot using two different media, video and 35 mm, we matched film and video and created in-between frames for images that were completely different.

Starting with one talent, our challenge was to multiply the talent or starting with multiple talents and ending with just one.

Contributors:

Buf Compagnie

Contact: Pierre Buffin Buf Compagnie 3, rue Roquépine Paris 75008 France + 33.1.42.68.18.28 + 33.1.42.68.18.29 fax contact@buf.fr

23 Toyota Future World Experience

Producer: Dentsu, Dentsu Tec, ExMachina

Summary:

"Future World Experience" is both a real roller coaster and a virtual exploration of what the car society will be like in the future. With the Cybercharacter guide, our audience chooses which universe to visit (Earth, Ocean, or Air) and the appropriate vehicle design (27 different vehicles are proposed) using the LCD screen in the car's control panel.

Contributors:

Client: Toyota Agency: Dentsu Tec Digital Images: ExMachina Original Concept: Arish Fyzee Ride: Intamin Contact: Sophie Bordone ExMachina 22, rue Hégésippe Moreau Paris 75018 France + 33.1.44.90.11.90 + 33.1.44.90.11.91 fax sbordone@exmachina.fr

24 The Game Room

Producer: Monty Clark

Summary:

"The Game Room" is a 3D computer animated demo of an idea for a TV show or web broadcast. The 3D animated characters review video games by interacting with them. The short, which highlights the skills of a very talented group of animators, contains 3D computer animation, 2D animation, 2D computer

animation, 2D computer animation, compositing, and an original soundtrack.

Contributors:

Brett Baker, Devon Browne, Andy Angrand, Nick Schreiber, Jorge Verera, Reynaldo Acevedo Contact: Monty Clark Exodus Entertainment, Inc. 1521 Alton Road Suite 186 Miami Beach FL 33139 USA + 1.954.941.9669 + 1.954.941.9677 fax exodus@the-beach.net

26 Morgan - Miss Parker

Producer: Partizan Midi Minuit

Summary:

Creation of a city in 3D.

Contributors:

Buf Compagnie

Contact: Pierre Buffin Buf Compagnie 3, rue Roquépine Paris 75008 France + 33.1.42.68.18.28 + 33.1.42.68.18.29 fax contact@buf.fr

LONG SHORTS

26 Avenue Amy

Producer: Sally Norvell

Summary:

"Avenue Amy" follows the life of its star as she searches for love in New York City's East Village. The actors were shot against green screens to achieve both a stylized look and to assure that their gestures and facial expressions would remain evident in the final animation. 3D environments were created from still photographs of New York locations and the footage was treated in After Effects. After the actors' skin tones and clothing shapes were pulled, a traditional cel animator painted the characters. .Finally, using 3D Studio MAX, lighting was added to give the scenes depth and realness.

Contributors:

Technical Directors: Lewis Kofsky, Birgit Rathsmann 3D Modeler: Jeeyun Sung Cel Animation: Vanessa Vanderbaan, Grace Liu 2D Compositor, Web Design: Marcos Zevallos Production Manager: Phil Higgs Writer: Amy Sohn

Contact:

Boo Wong Curious Pictures 440 Lafayette Street 6th Floor New York NY 10003 USA + 1.212.674.1400 + 1.212.674.0081 fax boo@curiouspictures.com

27 Wu Tang: Shaolin Style (game movies)

Producer: Anton Petrov, Daniel Prousline

Summary:

Famous Wu-Tang Clan members try to rescue Master Xin and save the world from the evil Mong Zhu emperor by practicing their Wu Tang skills in America and China. Created for PlayStation and based on the rap group Wu-Tang Clan, this piece was animated and rendered with Softimage 3D. A proprietary Mental Ray plug-in and lip-sync tools were used to create photorealistic hair, speech animation and facial expressions.

Contributors:

Art Director: Larry Paolicelli Story: Adam Goldberg Writer: Jay Halderman Assistant Director: Vladimir Aleksandrov Project Leader: Avenir Snjatkov Production Sketching: Vitaly Anickin Animation: Sergey Boguinsky, Anton Lomakin, Alexander Mialo, Anna Ksionz Face Animation: Vladimir Tchernych Modeling: Yuri Tchernych, Fidail Guilmoutdinov, Dmitry Astakhov Lighting, Texturing: Dmitry Kholodov, Natasha Kholiavko Composing, Post-Processing: Olga Tcheremisova Programmers: Anton Krupkin. Stanislav Volodarsky Contact: Featured Voices: Katt Brown. **Daniel Prousline** Warren Burton creat studio, LLC 438 Capp Street Additional Voices: Gregory D. Eagles, Erik King, Tony Masa, San Francisco CA 94110 USA Tohoru Masamune

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