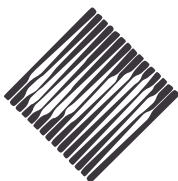


ACM SIGGRAPH VIDEO REVIEW



ISSUE 82

ACM SIGGRAPH '92
Electronic Theater
(part 2 of 2)

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30 . Does this Pulsar Have Orbiting Planets?

Time: 00:03:25

Produced by:
Cornell Theory Center

Summary:
A pseudo-periodic drift in pulse arrival times from a pulsar suggests the presence of orbiting planets. This animation illustrates how pulse data is used to derive planetary mass and orbits, and how the presence of these planets may be verified.

Contributors:
Alex Wolszczan, Liang Peng, Bruce Land, Andy Pierce, Dave Grossman, Judy Warren, Martin Berggren, Wayne Lytle: graphics, music, script.

Sponsor:
Cornell Theory Center/Cornell National Supercomputer Facility

Hardware:
IBM RS/6000 workstations

Software:
Wavefront Advanced Visualizer and in-house

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P.O. Box 576
Itasca, Illinois 60143-0576**

**Within USA: 800-523-5503
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FAX: 708-250-0038**

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621 Engineering & Theory
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Hoy Road
Ithaca, NY 14853-3801
(01) 607-254-8793
(01) 607-254-8888 fax
wayne@theory.tc.cornell.edu

31 . "Batman Returns" Visual Effects

Time: 00:01:00

Produced by:

Video Image Associates

Summary:

This work includes the visual effects of bats and the Batmobile shield. The bats were "behaviorally" animated. Both the bats and BatMobile shield were digitally composited on digitized live-action background and foreground elements.

Contributors:

Produced by: Tim Burton, Denise DiNovi, Larry Franco; Directed by: Tim Burton; Visual Effects Supervisor: Michael Fink; Video Image Crew: Richard Hollander, John Wash, Andy Kopra, Joseph Goldstone, Stanley Liu, Antoine Durr, Craig Reynolds, Glenn Neufeld, John DesJardin, Larry Weiss, Scott Peterson, Scott Gieger, Marc Scaparro, Mary Nelson, Cheryl Budgett

Contact:

Richard Hollander
Video Image Associates
5333 McConnell Avenue
Los Angeles, CA 90066
(01) 310-822-8872
(01) 310-821-1012 fax

32 . Penguin Blues

Time: 00:01:00

Produced by:

Ex Machina and HD/CG New York

Summary:

A miracle in Antarctica.

Contributors:

Xavier Nicolas - Philippe Billion

Hardware:

SGI

Software:

TDI Explore

Contact:

Xavier Nicolas
Ex Machina
22, rue Hégésippe Moreau
75018 Paris
France
(33) 1-42-93-26-27
(33) 1-42-93-53-44 fax

33 . Best of Geometric Fables (2 eb 3)

Time: 00:02:15

Produced by:

Fantôme Animation

Summary:

The series "THE GEOMETRIC FABLES" is a free adaptation of the Fables by J De La Fontaine and by Esope, made by Fantôme. Pierre Perret, a very famous French singer, wrote a new text, made songs, and is also the storyteller.

Hardware:

Silicon Graphics

Software:

TDI Explore

Contact:

Philippe Baudart
Fantôme Animation
71 rue Ampère
75017 Paris
France
(33) 1-40-53-01-23
(33) 1-40-53-02-07 fax

34. Energy Generation by Controlled Thunderstorm

Time: 00:02:00

Produced by:

Bill Hibbard

Summary:

Real-time interactive visual exploration of a simulation of an idea for generating energy from a controlled thunderstorm.

Contributors:

Bill Hibbard, Brian Paul, Greg Tripoli, Peter Pokrandt, Bill Gray

Hardware:

SGI 340 VGX

Software:

VIS-5D

Contact:

Bill Hibbard
Space Science and
Engineering Center
University of Wisconsin
Madison, WI 53706
(608) 263-4427
(608) 263-6738 fax
whibbard@vms.macc.wisc.edu

35. Dance in the Pants

Time: 00:00:30

Produced by:

Animal Logic

Summary:

Dance in the Pants, a commercial for Bonds Grand Slam Menswear "South Pole" briefs was produced by Animal Logic for OMON Australia. Discreet Logic's Eddie software was used for the morphing and shading in the piece.

Contributors:

Chris Godfrey

Hardware:

Silicon Graphics

Software:

Eddie by Discreet Logic

Contact:

Diana Sherwood
Discreet Logic, Inc.

5505 Boulevard
St.-Laurent, #4201-B
Montréal, Québec H2T
1S6
Canada
(01) 514-272-0525
(01) 514-272-0585

36. "Lawnmower Man" (particulation sequence)

Time: 00:01:12

Produced by:

Xaos Computer Animation &
Design

Summary:

Xaos created several minutes of animation for the virtual-reality thriller, "The Lawnmower Man," including this "particulation" sequence where the character is reduced to small swirling particles which eventually disperse into the air. This was created by combining digitally modified live-action images with 2D and 3D effects.

Contributors:

Mark Malmberg, Ken Pearce, Hayden Landis, Tony Lupidi, Eric Texier, Henry Preston, Roberta Brandao, Ric Tringali, Helene Plotkin, Brett Leonard, Gimel Everett

Sponsor:

Allied Vision/Lane Pringle Productions

Hardware:

Silicon Graphics Workstations

Software:

Xaos proprietary

Contact:

Helene Plotkin
Xaos, Inc.
600 Townsend Street
Suite 271E
San Francisco, CA 94103
(01) 415-558-9267
(01) 415-558-9160 fax

37. The Lawnmower Man

Time: 00:02:15

Produced by:

Angel Studios for Allied Vision
Lane Pringle Productions

Summary:

Angel Studios simulates a variety of futuristic VR environments in Stephen King's "The Lawnmower Man," including an aggression-training battlefield, a high-speed obstacle course and the ultimate interactive computer experience, CyberSex. Custom software techniques powerfully articulate the play between fact and fiction as Angel Studios' synthetic actor, CyberJobe, sets the stage for the movie's explosive ending.

Contributors:

Allied Vision/ Lane Pringle Productions in association with Fuji Eight Co., Ltd., New Line Cinema Corporation, Brett Leonard, Gimel Everett, Benjade Films, Inc., Angel Studios, Jill Hunt, Michael Limber, Brad Hunt, Diego

Angel, Jeff Hayes, Paul Lewis,
Lisa Sontag, Roberto Javier,
Dan Wyman, Frank Serafine,
Serafine Studios

Hardware:

Silicon Graphics workstations

Software:

Scenix proprietary and Wavefront

Contact:

Lisa Sontag
Angel Studios
5677 Oberlin Drive
Suite 101
San Diego, CA 92121
(01) 619-452-7775
(01) 619-452-8073 fax

38. Coming Attractions

Time: 00:02:11

Produced by:

Susan Alexis Collins

Summary:

Examining the ironies of being a strong, educated woman today, sandwiched between one's own needs and others' expectations, this piece is a reflection on modern mating habits and sexual balances of power. In "Coming Attractions" moving drawings weave themselves into a time-based collage, "videowallpaper," which when delayed expose a surprisingly menacing underbelly to our "everyday". "Coming Attractions," as the title suggests is just a hint at the promise of things to come.

Contributors:

Director/ Animator/ Editor: Susan Alexis Collins; Sound production: Greg Petersen

Sponsor:

Commodore Amiga (loan of Amiga 2000)

Hardware:

Amiga 2000

Software:

Deluxe Paint III

Contact:

Susan Alexis Collins
Computer Graphic Arts
Columbia College
600 South Michigan Ave.
Chicago, IL 60605
(01) 312-663-1600 x399
(01) 312-663-1707 fax

39. Liquid Selves

Time: 00:02:15

Produced by:

Karl Sims

Summary:

In virtual worlds, our consistent recognizable faces are left behind and all faces become masks. Our ability to drink from and contribute to the global information pool is greatly enhanced, but the effective destruction of our natural bodies is a possible consequence.

Contributors:

Music: Peter Gabriel, John Paul Jones; Thanks to: Lew Tucker,

Jim Salem, Gary Oberbrunner, Matt Fitzgibbon, Dave Shepard, David Marvit, Keith Waters, Kleiser-Walczak

Sponsor:

"Memory Palace" Art Futura '92

Hardware:

Connection Machine System

Software:

Karl Sims

Contact:

Karl Sims
Thinking Machines
Corporation
245 First Street
Cambridge, MA 02142
(01) 617-234-1000
(01) 617-234-4444 fax
karl@think.com

40. PDI Music Video Effects

Time: 00:01:00

Produced by:

Pacific Data Images

Contributors:

Client: MJJ Productions; Director: John Landis; Production Company: Propaganda Films; Transformation sequences: Pacific Data Images; Digital Effects Supervisor: Jamie Dixon; Animators: George Bruder, Ray Giarratana, Barb Meir, Amie Slate, Neil Eskuri, Janet Rentel, Rebecca Marie; Assistant Animator: Cathy Wagner; Produc-

ers: Julia Gibson and Michele Ferrone; Executive Producer: Glenn Entis

Hardware:

Silicon Graphics workstations
SGI IRIS

Software:

Proprietary

Contact:

Deborah Giarratana
Pacific Data Images
1111 Karlstad Drive
Sunnyvale, CA 94089
(01) 408-745-6755
(01) 408-745-6746 fax

41. Patellar Reflex

Time: 00:03:00

Produced by:

META Corporation

Summary:

The patellar reflex, a well known spinal reflex, is induced by tapping the tendon which causes a stimulation of muscle spindles resulting in afferent impulses evoking the discharge of the motor neurons in the spinal cord. This educational animation shows the mechanism of this reflex arc and the gamma loop. We are constantly taking on the challenge to construct an improved and more complex anatomical database.

Contributors:

Director: Eiji Takaoki; Modeling: Michiru Minagawa; Modeling

and Animation: Koichi Yamagishi; Programming and Sound: Takashi Isoko, Michio Holiuchi; Editing: Junko Fujiwara; Special thanks to META corporation USA

Hardware:

Silicon Graphics IRIS 4D/35, IRIS 4D/25, and Indigo

Software:

METAEDITOR, PERSONAL LINKS

Contact:

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Hanabusayama Heights
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3-10-51 Kamiohsaki
Shinagawa-ku, Tokyo 141
Japan
(81) 33-449-1261
(81) 33-449-1262 fax

42. Hubble Space Telescope: Image Deblurring with a Parallel Computer

Time: 00:02:45

Produced by:

NASA/Goddard Space Flight Center

Summary:

An image of the binary star system R-Aquarii, taken by the Hubble Space Telescope, is deblurred using a massively parallel implementation of the Maximum Entropy Method.

Contributors:

Mike Hollis, John Dorband. Producer: Dave Pape

Hardware:

SGI 4D/210 VGX

Software:

Custom

Contact:

Dave Pape
NASA/Goddard Space Flight Center
Code 932
Greenbelt, MD 20771
(01) 301-286-7980
((01) 301-286-5152 fax
dave@okeeffe.gsfc.nasa.gov

43. Visualization of Tectonic Features: Colorado River Extension Corridor

Time: 00:03:00

Produced by:

JPL/CalTech

Summary:

Image processing algorithms were developed to detail surface materials which defined fault zones. 3D terrain model with seismic data gave further evidence of long-term seismic activity in this region.

Contributors:

Ron Blom, Kevin Hussey, Robert Crippen, Gloria Brown-Simmons, David Okaya, Kathy Beratan, Eric Frost, Lisa Wainio, Jim Knighton, Bob Mortensen,

MIPL-JPL, Science Computing
Network-JPL, DIAL-JPL, JPL
Supercomputing Project Visuali-
zation Laboratory

Sponsor:

NASA Office of Space Science
Applications, Information Sys-
tems Branch and Land Process-
es Branch, NSF funding for
CALCRUST

Hardware:

VAX, SGI 3030, Alliant

Software:

Wavefront, Vicar

Contact:

Gloria Brown-Simmons
JPL/CalTech
MS 168-514, 4800 Oak
Grove Drive
Pasadena, CA 91001
(01) 818-354-4370
(01) 818-393-6962 fax
gbs314@ipl.jpl.nasa.gov

44. Scientific Visualization 1992

Time: 00:02:38

Produced by:

Pittsburgh Supercomputing
Center

Hardware:

Cray Y-MP 8/32, Sony Laser
videodisk recorder, DECstation
5000

Software:

GPLOT, P3D, DRAWCGM, Oa-
sis, RenderMan, ART

Contact:

Anjana Kar
Pittsburgh Supercomputing
Center
4400 Fifth Avenue
Pittsburgh, PA 15213
(412) 268-4960
(412) 268-5832 fax
kar@psc.edu

45. Three Dimensional Fractal Growth (DLA)

Time: 00:02:13

Produced by:

IBM

Summary:

Fractal cluster growth occurs in
a wide range of physical phe-
nomena, such as particle aggre-
gation and viscous fingering. A
common model for this growth is
Diffusion-Limited Aggregation
(DLA) in which particles move
following Brownian Motion and
adhere when they strike existing
particles. The music accompa-
nying the video is also fractal,
derived from a history of IBM
stock prices.

Contributors:

Daryl H. Hepting, F. David Frac-
chia, Lionel J. Woog, and Rich-
ard F. Voss; Producer: Benoit B.
Mandelbrot

Sponsor:

IBM & Yale University

Hardware:

IBM POWER Vis. Server

Software:

Alias RayTracing by Alias Research, Inc.

Contact:

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IBM T.J. Watson Research
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Route 134 - Kitchewan
Road
Yorktown Heights, NY
10598
(01) 914-945-1712
(01) 914-945-4149 fax
fractal@watson.ibm.com

46. LANL Video Sampler

Time: 00:03:44

Produced by:

Los Alamos National Laboratory

Summary:

The video sampler displays several scientific animations that have been visualized and captured into video using different computers at Los Alamos National Laboratory (LANL).

Contributors:

Harold Trease, John Fowler, Jeff Saltzman, Judy Winterkamp, James Bossert, Melvin L. Prueitt, Ted Yamada, Sue Bunker, Jim Painter, Chuck Hansen, Gary Glatzmaier, Susan Chandler, Thanasis Papathanasiou, Manuel Vigil, Stephany Bouchier, Ralph Ferguson, Dan Butler, Lorraine Whitman, Karl-Heinz Winkler, Stephen W. Hodson, Doug Kothe, Tomas Moore, Re-

gina Valenzuela, John Mareda
Producer: Andy A. Martinez.

Hardware:

Silicon Graphics, CM-2, Cray

Software:

Mostly in-house, AVS, MO-VIE.BYU

Contact:

Andy A. Martinez
Los Alamos National
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Los Alamos, NM 87545
(01) 505-667-4713
(01) 505-665-4361 fax
aam@lanl.gov

47. Visualization of Human Biomechanics

Time: 00:02:18

Produced by:

Engineering Animation, Inc. and
Iowa State University

Summary:

Animation of anatomically correct motion of human skeletal arm and hand. Tendons and muscle are added to the index finger.

Contributors:

Jim Lynch, Terran Boylan, Martin Vanderploeg, Brett Weichers, Craig Muncaster, John Libby

Hardware:

SGI

Software:

ERNIE and Hand Kinematics software

Contact:

Martin Vanderploeg
Engineering Animation, Inc.
and
Iowa State University
Ames, IA 50010
(01) 515-296-9908
(01) 515-296-7025 fax

Contact:

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((01) 510-770-8555 fax

48. Computer Graphics for CT and MRI

Time: 00:02:30

Produced by:

Cemax, Inc.

Summary:

Images were produced with a volume rendering and animation package developed in-house. It is important to realize that the data is "real" data. It was not acquired specifically for demonstrating graphics, but it is actual patient data supplied by hospitals.

Contributors:

Rodica Schileru-Key, David Fent

Hardware:

Sun SPARCstation

Software:

In-house