ACM SIGGRAPH Video Review Issue 51

The Film & Video Show of 1989. Part 1 of 2 TABLE OF CONTENTS

1. The Little Death Symbolics Graphics Division

2. A Moonlit Spring Night at Ma-ma Temple Naoko Motoyoski, HighTech Lab. Japan

3. Inforum Design/Effects

4. Her Majesty's Secret Serpent Apple Advanced Technology Group

5. Treadmill Geoff Campbell

6. Locomotion Steve Goldberg, Pacific Data Images

7. The Conquest of Form William Latham, IBM UKSC

8. NBC 1988 Olympic Open Filigree Films, Inc.

9. Gibbon Event Alan Ridenour

10. Visualization of Simulated Treatment of an Ocular Tumor Wayne Lytle

11. Continuum 1. Initiation Dean Winkler, Maureen Nappi

12. Mars - The Movie Jet Propulsion Laboratory, Digital Image Animation Lab (DIAL)

13. In Search of New Axis Polygon Pictures

14. Megacycles John Amanatides and Don Mitchell

15. Sio Benbor Junior Fantôme

16. Mathematics! Jim Blinn

17. Study of a Numerically Modeled Severe Storm Scientific Visualization Program, National Center for Supercomputing Applications

18. Margaux Cartoon Beth Warshafsky

19. L'AnnIversaire/Anniversary (An Excerpt) Centre d'Animatique, National Film Board of Canada

20. Paris: 1789 Initial Groupe, Club d'Investissement Media, Centre National de la Cinématographie

21. A Public Service Announcement WATARP

22. Breeze Xaos Inc.

23. Send in the Clouds Grumman Data Systems, Computer Graphics Laboratory

24. The Making of Without Borders Design/Effects

25. The Virtual Lobby John Rohlf



ACM SIGGRAPH Video Review Issue #51

The Film & Video Show of Siggraph/1989. Part 1 of 2.

1. The Little Death

Contact:

Matt Elson Symbolics Inc. 150 East 58th St., 34th fl. New York, NY 10155 USA 212-371-2112

Summary:

A visual poem created for HDTV. The original work on HDTV can be seen at the Symbolics booth on the Exhibition Floor.

Produced by:

Symbolics Graphics Division

Credits:

Director: Matt Elson; Producer: Marc Scaparro; Music: Haze Greenfield; Guru: Larry Stead; HDTV Output: Sony Advanced Systems Division

Hardware:

Symbolics 3600 series computers

Software:

Symbolics S-Products release 4.1

2. A Moonlit Spring Night at Ma-ma Temple

Contact:

Naoko Motoyoshi 4-24-12 Higashikoiwa Edogawa-ku Tokyo 133 JAPAN 03-672-4516

Summary:

The cherry blossom spirits come out to play among the blossoms on a moonlit spring night.

Produced by:

Naoko Motoyoski, HighTech Lab. Japan

Credits:

Computer Graphics: Naoko Motoyoshi; Music: Yasuhiro Kawasaki

Hardware:

Iris 3030, Pixar

Software:

Wavefront Technologies, High-Tech Lab. Japan

3. Inforum

Contact:

Lisa Berson Design/Effects 535 Plasamour Dr. Atlanta, GA 30324 USA 404-876-7149

Summary:

Computer generated representation of a large corporate office facility prior to construction.

Produced by:

Design/Effects

Credits:

Client: Jack Morton Productions; Animators: Bill Schultz, Henry LaBounta, Barry Dempsey, Jim Moorhead

Hardware:

Silicon Graphics 4D/70, 3130; Abekas A60; MC/Tondreau Motion Control System

Software:

Wavefront Technologies

4. Her Majesty's Secret Serpent

Contact:

Gavin Miller Apple Computer Inc. MS60W 20705 Valley Green Dr. Cupertino, CA 95014 USA 408-974-0186

Summary:

All of the motion was created with simulated dynamics.

Produced by:

Apple Advanced Technology Group

Credits:

Gavin Miller, Michael Kass, Lance Williams, Roger Spreen, Dick Craddock, John Worthington

Hardware:

Silicon Graphics Power Series Workstation

Software:

In house modeling, rendering, animation and simulation software

5. Treadmill

Contact:

Geoff Campbell 20 George Henry Blvd. Willowdale Ontario CANADA M2J 1E2 416-494-8576

Summary:

This short piece evolved from being an exercise for a walk cycle to the animation of two men pushing wheels.

Produced by:

Geoff Campbell

Credits:

Special thanks to Onzième Ciel for use of their facilities.

Hardware:

Silicon Graphics Iris 4D/70 Workstation

Software:

Alias

6. Locomotion

Contact:

Steve Goldberg Pacific Data Images 1111 Karlstad Dr. Sunnyvale, CA 94089 USA 408-745-6755

Summary:

Can a classic children's fable survive in today's world of flashy computer graphics? We think it can. We think it can. We think it can.

Produced by:

Steve Goldberg, Pacific Data Images

Credits:

and Directed by: Produced Steve Goldberg; Animation Howard E. Baker: Director: Story: Henry F. Anderson III. Steve Goldberg, Howard E. Baker, Jim Ward, Tim Johnson, Nick Ilvin, Joe Palrang, Bill Foss; Backgrounds: Nick Ilvin; Animation: Steve Goldberg, Howard E. Baker. Tim Johnson. Karen Schneider, Nick Ilvin, Roger L. Gould, Carlos Michael Arauello. Collery: Music and Sound Effects: Stone: Christopher L. Locomotion Software: Graham Walters; Special Effects: Susan McVey, Rex Grignon, Carlos Arguello; Software: Thad Beier. John Gross, Michelle Tsui, Richard Chuang; Modeling: Nick Ilyin, Steve Goldberg, Tim Johnson, Karen Schneider, Ray Rex Grianon. Giaratanna. Theresa Ellis, Michael Collery; Diaitizing: Jane DeKoven. Ward. Andi Cho: James Production Manager: Patty Wooton; Loads O' Thanks To: Carl Rosendahl. Glenn Entis. Nancy St. John. Mark Goldberg, James Dixon, Dick Walsh, Larry Lessler, Marv Keenan, Shae McClory, Debbie Gaeta, Mark Sorensen, Richard Ravnis, Terry Emmons, Lucy Torres

Hardware:

Silicon Graphics Personal Iris and 4D/GTX, MIPS M-120,

Raster Tech 1/25 framebuffer **Software:**

PDI in house proprietary software

7. The Conquest of Form

Contact:

William Latham IBM UKSC St. Clement Street Winchester Hampshire SO23 9DR UNITED KINGDOM 0962-844-191

Summary:

A computer art film made using constructive solid geometry (CSG) combined with 3D texturing, lighting, and surface qualities. Shows the creation of complex structures.

Produced by:

William Latham, IBM UKSC

Credits:

Artist: William Latham; Software: Peter Quarendon, Stephen Todd; Production Assistant: Richard Wilkes

Hardware:

IBM 3081, IBM 5080 Display **Software:**

ESME + WINSOM Software

8. NBC 1988 Olympic Open

Contact:

Sally R. Kanner Filigree Films 155 Ave. of the Americas New York, NY 10013 USA 212-627-1770

Produced by:

Filigree Films, Inc.

Credits:

Designers: Terry Mui, Syd Goldberg, Kim Man Ku; Project Art Director: Scott Radar; Company Art Directors: Terry Mui, Syd Goldberg; Director of Animation: Terry Mui; Modeling & Software: Don Livingston, Mi Kyung Kim, Tetsu Kishimaki **Hardware:** Apollo Domain Series

Software:

Intelligent Light

9. Gibbon Event

Contact:

Alan Ridenour UCLA Design Dept. 1300 Dickson Art Center Los Angeles, CA 90024 USA 213-206-0206

Summary:

Gibbon Event was done by a graduate student from The After Hours Group of the UCLA Animation and Design Department who spent many, many research hours at the zoo.

Produced by:

Alan Ridenour

Credits:

Animator: Alan Ridenour; Music: Andrew Deaseantro Hardware: Silicon Graphics Iris 3130 Software: Wavefront Technologies

10. Visualization of Simulated Treatment of an Ocular Tumor

Contact:

Wayne Lytle Cornell National Supercomputer Facility B49 Caldwell Hall Garden Ave. Ithaca, NY 14853 USA 607-255-4162

Summary:

Scientific visualization in action to save life.

Produced by:

Wayne Lytle

Credits:

Supercomputer simulation: Mark Rondeau; Data acquisition: Anne Dumke

Hardware:

Animation: Silicon Graphics 4D/ 80; Rendering:

IBM 3090 Supercomputer

Software:

Wavefront Technologies Inc.

11. Continuum 1. Initiation

Contact:

Dean Winkler Post Perfect 220 East 42nd Street New York, NY 10017 USA 212-972-3400

Maureen Nappi Inc. 229 W. 78th St., #84 New York, NY 10024 USA 212-877-3168

Summary:

Initiation is the first of four movements in the Continuum set. The underlying theme of Initiation is the beginning and evolution of consciousness. The goal of this series is to elicit a state of suspension both intellectually and emotionally on the part of the viewer.

Produced by:

Dean Winkler, Maureen Nappi

Credits: Hardware:

Silicon Graphics 3130 workstations, Celerity 1260 rendering engines, Silicon Graphics CS-12 rendering engine, Raster Tech one/80 frame buffer. Quantel Paintbox and Harry with Rainbow, Grass Valley Group Kaliedoscope digital video image processors, Grass Valley Group GVG-300 switcher, Abekas A62 digital disk recorder, CMX-3600 editing controller, Sony DVR-1000 digital videotape recorders, Sonv DVR-10 digital videotape recorders

Software:

Wavefront Technologies 3D animation software (Model, PreView and Image), Post Perfect object generation/interpolation software, Quantel Ver 4.16 operating system, Kaliedoscope Ver 4.0b

12. Mars - The Movie

Contact:

Betsy Asher Hall JPL 4800 Oak Grove Dr M/S 168-522 Pasadena, CA 91109 USA 818-354-6257

Summary:

A fly-by over the distinctive Mars surface using satellite data represents the first animated look at some of the planet's geographically intriguing regions.

Produced by:

Jet Propulsion Laboratory, Digital Image Animation Lab (DIAL)

Credits:

Betsy Asher Hall, Jeffrey R. Hall, Kevin J. Hussey, Charles Thomas Kelly, Robert A. Mortensen, Andrew J. Pursch

Hardware:

MicroVAX II, VAX 8600, Alliant FX8-4, Sun 4

Software:

JPL's Image Processing Software - VICAR 2

13. In Search of New Axis

Contact:

Toshifumi Kawahara Polygon Pictures Inc. Bond Street T11 2-2-43 Higashi Shinagawa Shinagawa-ku Tokyo 140 JAPAN 03-474-4321

Summary:

This research piece explores a way to handle an object's deformation in the most unified manner. X,Y,Z,O combine twisting, bending and diversion, which are the important attributes during deformation.

Produced by:

Polygon Pictures

Credits:

Toshiaki Katoh; Collaborators: Takashi Fukumoto, Tatsuya Shimamoto, Yasuo Tojo, Akira Yoshida; Associates: Namco, Sony, Nippon Steel

Hardware:

SUN 4/260, SUN 3/60, NEWS 841

Software:

Original Software

14. Megacycles

Contact:

Don Mitchell AT&T Bell Labs Rm 3C-446 B 600 Mountain Ave. Murray Hill, NJ 07974 USA 201-582-5862

Summary:

Extensions to constructive solid geometry (CSG) allowing recursive models. The final scene of this film, showing over 12,000 robot figures, is represented by only a few thousand bytes of data.

Produced by:

John Amanatides and Don Mitchell

Hardware:

AT&T Pixel Machine 964

Software:

FX, experimental ray tracer

15. Sio Benbor Junior

Contact:

Fantôme 71 rue Ampere 75017 Paris FRANCE 1-40-53-01-23

Summary:

Sio Benbor Junior is a parody of Luxo Junior by John Lasseter and the second episode of the humoristic film series. In spite of his young age, ridiculous red nose, and artificial understanding, Sio Benbor was a big hit at Imagina '89 where he was awarded the European Grand Prix PIXEL-INA.

Produced by:

Fantôme

Hardware:

Cubicomp

Software:

Picturemaker

16. Mathematics!

Contact:

Don Delson 305 S. Hill Pasadena, CA 91106 USA 818-356-3750

Summary:

Project Mathematics! is a series of videotapes to teach high school math, funded with seed money from SIGGRAPH and ongoing funds from the National Science Foundation, Hewlett-Packard, and Truevision.

Produced by:

Jim Blinn

Hardware:

Everex PC compatible, Abekas **Software:** In house software

17. Study of a Numerically Modeled Severe Storm

Contact:

Daniel Brady 152 Computing Applications Bldg. 605 East Springfield Ave. Champaign, IL 61820 USA 217-244-2003

Summary:

The understanding of severe storms begins by identifying

pre-storm conditions. Using this initial environment, a thunderstorm's complexity is modeled with a set of mathematical equations. These equations are solved on a supercomputer, then visualization techniques are employed to simulate the air flow and other features that exist during a storm's lifetime.

Produced by:

Scientific Visualization Program, National Center for Supercomputing Applications, supported by the National Science Foundation, State of Illinois, University of Illinois at Urbana-Champaign and Corporate Partners.

Credits:

Animation: Arrott, Matthew Mark Bajuk, Colleen Bushell. Jeff Yost: Research: Robert Wilhelmson, Harold Brooks, Brian Jewett, Crystal Shaw, Louis Wicker; Support: Randy Butler, and the Scientific Media Services, NCSA; Script: Cathy Robinson; Audio: Roger Francisco; Live action footage: Courtesy of the National Severe Storms Laboratory and the University of Mississippi

Hardware:

Alliant VFX/80, Silicon Graphics Iris 3130, Abekas A62, Cray-2, Macintosh II, Sun 360

Software:

Wavefront Technologies, various in house visualization software.

18. Margaux Cartoon

Contact:

Beth Warshafsky Electric Picture Works 24 W. 40th St., 3rd floor New York, NY 10018 USA 212-219-1912 (Home) 212-869-2500 (Work)

Summary:

This work sprang out of the immediacy of drawing, direct from my subconscious.

Produced by:

Beth Warshafsky Hardware: Quantel Paintbox, Abekas A62

19.L'Anniversaire/ Anniversary (An Excerpt)

Contact:

Doris Kochanek Centre d'Animatique, P-36 National Film Board of Canada P.O. Box 6100, Station A Montréal, Québec CANADA H3C 3H5 514-283-9309

Summary:

In the midst of frantic preparations for a party, three characters discover to their horror that they have done something unpardonable. Will they be able to restore order in time for the festivities? Produced in celebration of the 50th anniversary of the National Film Board of Canada.

Produced by:

Centre d'Animatique, National Film Board of Canada

Credits:

Directors/Animators: Marc Aubry, Michel Hébert; Fireworks: Doris Kochanek; Computer graphics team: Ines Hardtke, Terry Higgins, Doris Kochanek, Dave Martindale: Producer: Robert Forget; Addirendering resources: tional CAE Electronics Ltd., Wavefront Technologies Inc.

Hardware:

Silicon Graphics 2400T, 4D/70, and Power Series workstations; Celco CFR-8000 film recorder

Software:

Wavefront Technologies Inc. and various custom packages developed in house

20. Paris: 1789

Contact:

Xavier Nicolas ExMachina 22, rue Hegesippe Moreau 75018 Paris FRANCE 1-43-87-58-58

Summary:

A walk in Paris at the Revolution's dawn.

Produced by:

Initial Groupe, Club d'Investissement Media, Centre National de la Cinématographie

Credits:

The ExMachina Team; Directed by: Jose Xavier, Jerzy Kular

Hardware:

Silicon Graphics

Software:

Explore (Thomson Digital Image)

21. A Public Service Announcement

Contact:

Phillip J. Barry Dept. of Computer Science University of Waterloo Waterloo, Ontario CANADA N2L 3G1 519-888-4421 or 888-4534

Summary:

This work illustrates the use of hierarchical B-splines for character animation.

Produced by: WATARP

Credits:

Dave Forsey, Phil Barry, Shawn Neely, Ron Pfeifle, Jeff Smith, Dave Blosdale

Hardware:

Silicon Graphics 4D-GT, VAX 8600, Tascam Porta Two, Kazoo

Software:

Spline modeling and animation software by David Forsey

22. Breeze

Contact:

Arthur Schwartzberg Xaos Inc. (formerly Eidolon Inc.) 350 Townsend St. #101 San Francisco, CA 94107 USA 415-243-8467

Summary:

Seeking an emotive quality via harmony, composition, and choreography. Inspired by Henri Fantin-LaTour, 19th century French painter.

Produced by:

Xaos Inc. (formerly Eidolon Inc.)

Credits:

Art Director: M. Tolson; H. Landis, M. Malmberg, R. Tringall

Hardware:

Eight networked Apollo workstations; AT Vista framebuffers

Software:

Eidolon's proprietary 'Forum' system, Time Arts Lumena for paint

23. Send in the Clouds

Contact:

Geoffrey Y. Gardner MS D12-237 Grumman Data Systems 1000 Woodbury Rd. Woodbury, NY 11797 USA 516-682-8417

Summary:

Simulation of cumulus cloud development

Produced by:

Grumman Data Systems, Computer Graphics Laboratory

Credits:

Geoffrey Y. Gardner, Eric De Mund, Bill Sakoda

Hardware:

Silicon Graphics Iris 4D/70 GT, Lyon Lamb MINI VAS, Sony BVU 950 SP

; Software:

Grumman proprietary, Fortran 77 and C code

24. The Making of Without Borders

Contact:

Lisa Berson Design/Effects 535 Plasamour Dr. Atlanta, GA 30324 USA 404-876-7149

Summary:

The story of the design and creation process for the opening of a documentary about saving the world's rivers. Nonkeyframe based techniques were used. The program was created and composited entirely digitally.

Produced by:

Design/Effects

Credits:

Client: Nick Boxer, TBS Documentary Unit

Hardware:

Silicon Graphics 4D/70, Sun 3/ 280, Abekas A60, Sony DVR

1000, Digital Quantel Suite

Software:

Wavefront Technologies and in house software

25. The Virtual Lobby

Contact:

John Rohlf 307 Sitterson Hall The University of North Carolina Chapel Hill, NC 27599 USA 919-962-1827

Summary:

An animated and real-time walk-through of a realistically illuminated virtual lobby.

Produced by:

John Rohlf

Credits:

J. Airey, P. Rheingans, J. Rohlf; Principal Investigator: F.P. Brooks

Hardware:

SUN and DEC workstations, Pixel-Planes 4

Software:

Auto CAD; custom radiosity, animation, and rendering software

For information regarding purchase of the SIG-GRAPH Video Review tapes contact:

ACM Order Department P. O. Box 64145 Baltimore, MD 21264 1-(800) 342-6626