ACM SIGGRAPH VIDEO REVIEW

ISSUE 127



SIGGRAPH 98 TECHNICAL KNOW HOW TABLE OF CONTENTS

- 1 Invisible Ocean—ExMachina
- 2 Synthetic Speech—Autometric, Inc.
- 3 The Blue Heron Advancing Captured Motion—LambSoft
- 4 The Cornell Box Up in Smoke-mental images GmbH & Co. KG
- 5 News from the Hubble Space Telescope—*The Space Telescope Science Institute*
- 6 Crayoland—Electronic Visualization Laboratory, University of Illinois at Chicago
- 7 Handling Video in Virtual Environments—Bell Laboratories
- 8 Loose and Sketchy Animation—University of Washington

ACM SIGGRAPH VIDEO REVIEW

ISSUE 127 SIGGRAPH 98 Technical Know How

SIGGRAPH 98 In-between Animations

CONTRIBUTORS:

Scott Roberts; Ringling School of Art and Design-Abdullah Alothman, Brian Burks, Chris Chisholm, Scott Dace, David Elliott, Daniel F. Lazarow, Geoffrey Moehl, Matt Omernick, Michael Sanborn, Wilson Smith. Bao Vu, Jason Wen; Sante Fe Community College-C. Alan Crandall: School of Visual Arts. NY-Ilya Polnarev; Texas A&M Visualization Laboratory— Patrick James, Michael Mao. Scotty Sharp, William Sheffler, Sandra Singler, Ryan Swaim, Kristian ten Wolde: Visualization Laboratory DGSCA/UNAM-Víctor H. Godoy

1 Invisible Ocean

PRODUCER:

Telemundi, Sam Wolfgang Stein

SUMMARY:

Don't miss your only chance to see plankton as it is in nature! Based on historic and scientific research conducted by the Oceanographic Museum of Monaco, "Invisible Ocean" focuses on the process of photosynthesis and the importance of plankton in the food chain

CONTRIBUTORS:

A film by François Garnier Director: François Garnier Contributors: Monaco Interexpo, the Oceanographic Museum of Monaco

© Telmundi - ExMachina

CONTACT:

Sophie Brun ExMachina 22 rue Hegesippe Moreau 75018 Paris France +33.1.44.901190 +33.1.44.901191 fax sophie@exmach.fr

2 Synthetic Speech

PRODUCER:

Gwenn Afton-Bird, Kim R-J Wallace, Michael Walsh

SUMMARY:

The creation of realistic 3D synthetic human speech and animation is an ongoing R&D project at Autometric, Inc. For "Synthetic Speech," speech-acoustic and motion capture data was gathered at Biomechanics Inc., analyzed through the use of computer speech recognition techniques and Principal Component Analysis at Entropic Research Labs, and was rendered using Maya software.

CONTRIBUTORS:

Director: Kim R-J Wallace, Gwenn Afton-Bird, Michael Walsh

Autometric, Inc.: Mike Darweesh, Thom Goertel, Melissa Durley The Creative Visualization Department Entropic Research Labs: David Talkin, Levent Arslan, Francisco Gimenez de los Galanes, Jack Unverferth Special Thanks: Biomechanics, Inc., Mike, Greg Dismond, Tony Moraco

CONTACT:

Melissa Durley Autometric, Inc. 7700 Boston Boulevard Springfield VA 22153 USA

+1.703.923.4075 +1.703.923.4001 fax

mdurley@autometric.com

3 The Blue Heron -Advancing Captured Motion

PRODUCER:

Larry Lamb

SUMMARY:

The blue heron animation in this presentation was created by LambSoft, Inc. of Minneapolis. LambSoft Pro Motion software enables animators to apply captured motion to characters whose shape, size, proportion and structure vary from the performer.

CONTRIBUTORS:

Director: Susan Van Baerle Motion/Animation: Susan Van Baerle

Performer: Julie Sutton Modeling: Kelly Schrandt Software: Jeff Thingvold Flame Compositor: Rex Carter Music Courtesy Loreena McKennitt, Quinlan Road

CONTACT:

Pat Hunter LambSoft 650 3rd Avenue South 17th Floor Minneapolis MN 55402 USA

+1.612.337.3739

+1.612.333.9173 fax

phunter@lambsoft.com

4 The Cornell Box - Up in Smoke

PRODUCER:

mental images GmbH & Co. KG

SUMMARY:

This simulation of light through smoke takes advantage of a homogeneous and nonhomogeneous medium, and an isotropic and anisotropic reflection.

CONTRIBUTORS:

Director: Per H. Christensen Contributors: Henrik Wann Jensen, Steffen Volz

CONTACT:

Per H. Christensen
mental images GmbH & Co.
KG
Fasanenstrasse 81
D-10623 Berlin
Germany
+49 .30.315.997.12
+49.30.315.997.33 fax
per@mental.com

5 News from the Hubble Space Telescope

PRODUCER:

Ginger French

SUMMARY:

Based on data from the Hubble Space Telescope, these four Space Telescope Science Institute animations illustrate how objects in space, detected at vast distances from us, move and change over time.

CONTRIBUTORS:

Director: Ginger French
Animator: Thomas Goertel
Editor: Brian Preston
Engineer: Ed Weibe
Music: Jonn Serrie
Voices of Investigators using
Hubble: David Leckrone
(Hubble as a Black Hole
Finder), Harold Weaver (Comet
Hale-Bopp Nucleus), Mario
Livio (Binary Star Planetary
Nebula), Richard McCray
(Shock Waves Hit the Ring of
Supernova 1987A)

CONTACT:

Ginger French
The Space Telescope
Science Institute
3700 San Martin Drive
Baltimore MD 21218
USA
+1.410.338.4894
+1.410.338.4579 fax
french@stsci.edu

6 Crayoland

PRODUCER:

Dave Pape

SUMMARY:

These highlights from a real-time recording of "Crayoland," an interactive virtual environment, are expressly non-photorealistic. "Crayoland" contradicts the stereotypical complex, high-tech image of VR, being constructed entirely of flat, child-like crayon drawings.

CONTRIBUTORS:

Director: Dave Pape Contributors: Jim Costigan, Jeremy Hollister

CONTACT:

Dave Pape
Electronic Visualization
Laboratory
University of Illinois at
Chicago, M/C 154
851 South Morgan Street
#1120
Chicago IL 60607
USA

+1.312.996.3002 +1.312.413.7585 fax pape@evl.uic.edu

7 Handling Video in Virtual Environments

PRODUCER:

J. Robert Ensor

SUMMARY:

This video illustrates two of the effects introduced in the paper

"Techniques for Handling Video in Virtual Environments." It shows a way to represent objects as they move between 3D graphical spaces and video displays. The video also shows how images and video displays can respond to user viewpoint changes.

CONTACT:

J. Robert Ensor
Bell Laboratories
101 Crawfords Corner Road
4F 607
Holmdel NJ 07733-3030
USA
+1.732.949.2979
+1.732.949.0399 fax
ire@bell-labs.com

8 Loose and Sketchy Animation

PRODUCER:

Cassidy J. Curtis

CONTRIBUTORS:

Director: Cassidy Curtis Contributors: Bret Battey, Jud Holliday, Jason Ilano

CONTACT:

Cassidy J. Curtis
Dept. of Computer Science
and Engineering
University of Washington
Box 352350
Seattle WA 98195-3250
USA

- +1.206.616.9005
- +1.206.543.2969 fax cassidy@cs.washington.edu