

**Tricks of the Trade:
Computer Graphics Production**

Organizer

JERRY WEIL
Metrolight Studios

Lecturers

NEIL ESQUIRE
Disney Feature Animation

ANDY KOPRA

VFX

JOHN MCCLAUGHLIN

Digital Domain

KATHY WHITE

Rhythm and Hues Studio

C O U R S E

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N O T E S



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TRICKS OF THE TRADE: COMPUTER GRAPHICS PRODUCTION

Course Notes for SIGGRAPH '95

Course Organizer

**Jerry Weil
Metrolight Studios**

Course Speakers

**Neil Eskuri
Disney Feature Animation**

**Andy Kopra
VIFX**

**John McLaughlin
Digital Domain**

**Kathy White
Rhythm and Hues**

Abstract

This course is intended to aid those involved in the field of computer graphics production to become more productive and more efficient in their daily work environment. There are a myriad of little tricks and lessons which people learn through years of working in a production environment; there is quite often a reinventing of the wheel process which takes place with each person as they enter the field and discover many of these tidbits for themselves. This course is designed to cut through much of that process by offering as much of this information as possible in the course notes and in the presentations by the various speakers. The speakers represent a wide spectrum of production environments within the entertainment field, so that a variety of ideas and methodologies will be presented.

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Tricks of the Trade: Computer Graphics Production

Course Outline

In this course we are trying to provide a wide range of ideas and methodologies as exercised in various production companies. Therefore, most sections will be presented by multiple speakers.

1) Introduction (10 minutes)

2) Modeling (including Procedural Modeling) (40 minutes)

3) Animation (40 minutes)

Morning Break

4) Procedural Animation (50 minutes)

5) Character Animation (55 minutes)

Lunch

6) Color and Lighting (45 minutes)

7) Structuring Jobs (45 minutes)

Afternoon Break

8) Programming as Metaphor (45 minutes)

9) Q & A (60 minutes)

About the Speakers

Jerry Weil (chair)

Jerry Weil is a Senior Animator at Metrolight Studios in Los Angeles. He has been involved in the field of Computer Graphics for the past 15 years, beginning as a research assistant while a student at Brown University. After receiving his Bachelor of Arts and Masters Degree from Brown, Jerry worked at AT&T Bell Laboratories in Murray Hill, N.J. as a Member of the Technical Staff, working on a variety of research projects in computer animation and image processing. In 1988 Jerry went to work for Whitney Demos Productions in the software research department, soon thereafter helping to found Optomystic (now U.S. Animation). Since 1990 he has worked at Metrolight Studios, working on a variety of commercial and film projects including ABC's "World of Discovery," AMC's "Silence is Golden," and commercials for Shield, Budweiser and Milk, and the "Blink" and "Batman Forever" features.

Neil Eskuri

Neil Eskuri began his career in CGI in 1982, working at Robert Abel and Associates as a modeler and animator for several award winning commercials, such as the Benson and Hedges "Gold" series, Hawaiian Punch's "Chain Reaction" and Olympic Stain. In 1988, Neil went to work for Metrolight Studios. There, he helped animate several noted projects including ABC's "World of Discovery," AMC's "Feature Presentation" (the first to introduce the Clip character), and the feature "Total Recall." After leaving Metrolight in 1991, Neil worked on the morphing animation of Michael Jackson's "Black and White" video at PDI, and several commercial characters at Rhythm and Hues. When Sony Pictures began its visual effects department, Neil began working there, doing effects animation for feature films such as "The Last Action Hero," "My Life," and "Tall Tale." After two years, Neil moved to Disney Feature Animation, where he has been working as animation lead on the crew for one of the sequences in the upcoming "Fantasia Continued."

Andy Kopra

Andy Kopra is the Director of Software at VIFX, a special effects production company in Los Angeles. Andy received a B.A. in Fine Arts from Rice University, specializing in Film and Photography. He attended graduate school at New York University, taking courses in the Cinema Studies and Computer Science departments. Andy has been involved professionally in computer graphics since 1982. He worked as a computer animator and programmer at Digital Effects Inc., a pioneering computer graphics production company in New York City. In 1985, he joined the Symbolics Graphics Division to provide support for its computer graphics customers, later working as an application designer and programmer. He has been a computer animator and programmer at VIFX since 1990, creating special effects for motion pictures and designing, writing and documenting the VIFX Software system. His special effects credits include "Batman Returns," "Cliffhanger," "Time Cop," "Speed," and "Tall Tale."

John McLaughlin

John McLaughlin earned a Ph D in Mathematics from New York University in 1986, and was hired as a staff mathematician and programmer at Whitney/Demos Productions that year. After Whitney/Demos he wrote computer graphics software for several companies (some of which are still in existence). In 1990 he joined Metrolight Studios as a Technical Director and in 1993 was promoted to CG Supervisor for the effects in the "Viper" television pilot. For the last two years he has been a Digital Effects Supervisor at Digital Domain, working on the award winning "Jeep - Snow Covered" commercial, a top secret theme park project, and the "Apollo 13" feature film

Kathy White

Kathy received a BFA in Motion Picture Production, with a minor in Computer Science, from Wright State University in Ohio and began her career as a Curriculum Development Analyst at the NCR Corporation. In 1985, Kathy began working for Robert Abel and Associates as a Technical Director and Manager of the Modeling Department. At Abel's, Kathy worked on award winning spots such as Hawaiian Punch's "Chain Reaction" and the Benson and Hedges "Gold" Series. In 1987, Kathy joined Rhythm and Hues as a Technical Director, and three years later she was head of the new Modeling Department. Kathy has animated and lighted numerous projects, including the Emmy Award winning Station ID for KTLA, the "Galaxy's Child" episode of "Star Trek: the Next generation" and the visual effects scenes for the feature "Stay Tuned". She is currently a CG supervisor, having supervised the Circlevision film "From Time to Time" for EuroDisneyland, the motion base ride "Seafari" for MCA Universal, and sequences for the feature "Batman Forever".