

## **Electronic Publishing on CD-ROM**

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# **Course** **13** **NOTES**



### **SIGGRAPH 1995**

**22nd International Conference on Computer  
Graphics and Interactive Techniques**

**Conference/6-11 August 1995  
Exhibition/8-10 August 1995  
Los Angeles Convention Center  
Los Angeles, California USA**

# Electronic Publishing on CD-ROM

A Course Presented at SIGGRAPH 95  
Los Angeles, California  
August 7, 1995

## Speakers.

Steve Cunningham  
Steve Langer  
Judson Rosebush  
Tom Volotta

The notes for this course are based on a manuscript by the same title that will appear in late 1995 from O'Reilly & Associates. They contain their own Table of Contents.

## Course schedule

<b>8:30 - 10:00:</b>	<b>Steve Cunningham</b> Issues and challenges in electronic publishing
<b>10:30 - 12:00</b>	<b>Judson Rosebush</b> The electronic publishing business
<b>1:30 - 3:00</b>	<b>Tom Volotta</b> Authoring and development issues in electronic publishing
<b>3:30 - 5:00</b>	<b>Steve Langer</b> Getting your publication onto the disc

## Speakers

The course speakers are Steve Cunningham (course organizer), Steven Langer, Judson Rosebush, and Tom Volotta.

**Steve Cunningham** is a Professor of Computer Science at California State University Stanislaus. His professional interests focus on electronic publishing, computer graphics education, and the use of computing in communication and scientific studies. He is co-author of *Programming the User Interface: Principles and Examples* (Wiley, 1989, with Judith R. Brown) and the forthcoming *Electronic Publishing on CD-ROM* (O'Reilly & Associates, 1995, with Judson Rosebush), and co-editor of three books: *Visualization in Teaching and Learning Mathematics* (Mathematical Association of America, 1991, with Walter Zimmermann), *Interactive Learning Through Visualization* (Springer-Verlag, 1992, with R. J. Hubbard), and *Computer Graphics Using Object-Oriented Programming* (Wiley, 1992, with Nancy Craighill, Martin Fong, and Judith R. Brown).

Cunningham has served as chair of SIGGRAPH's Education Committee, as chair of the SIGGRAPH 91 Educators' Program, and as Director for Publications, and as a member of the Board of Governors of the Mathematical Association of America. He is currently the Chair of ACM SIGGRAPH.

**Steve Langer** is a CD-ROM product engineer with Disc Manufacturing, Inc. (DMI) in Huntsville, Alabama. He has both MS and BS degrees in mechanical engineering from the University of Illinois at Urbana-Champaign. His responsibilities at DMI include providing CD-ROM application and technical support to sales, marketing, customers, and manufacturing. He has detailed experience in the formatting and conversion of customer input media to the CD-ROM manufacturing process, and is co-author of the DMI professional paper, "Compact Disc Terminology", now in its second edition.

Before joining DMI, Mr. Langer worked for several years at the IBM Corporation as a UNIX workstation marketing specialist. He was responsible for marketing, designing, and technically supporting engineering/scientific and commercial computing systems. Before IBM, Mr. Langer worked for Rockwell International as a propulsion systems engineer for the Advanced Launch System.

**Judson Rosebush** is a producer and director of computer animation, an author, and a media theorist. He founded Digital Effects Inc., the company that virtually introduced computer animation to the commercial marketplace. He has directed over 1000 commercials and logos and his feature film credits include Walt Disney's *TRON*. In the early 1990s he co-authored and directed television programs on *Volume Visualization* and *HDTV and the Quest for Virtual Reality*. He is the co-author of *Computer Graphics for Designers and Artists*, 2nd edition (Van Nostrand Reinhold, with Isaac Kerlow), *Electronic Publishing on CD-ROM* (O'Reilly & Associates, with Steve Cunningham), and is now completing a new book, *Computer Animation*, for the same publisher. He is the author of the serialized *Pixel Handbook*, the American editor of *Pixel Vision* magazine, a columnist for *CD-ROM Professional*, and has written widely on computer graphics and new media.

The Judson Rosebush Company is a creative multimedia studio currently producing animation, interactive interfaces, QuickTime movies, and editorial content for computer-controlled laser disk and CD-ROM titles. Rosebush recently completed two CD-ROMs, *Isaac Asimov's The Ultimate Robot* and *Gahan Wilson's The Ultimate Haunted House*, both published by Byron Preiss Publications and distributed by

Microsoft, and is currently directing a CD-ROM on *The Vietnam War* that is a joint venture between CBS News and *The New York Times*, and will be distributed by Apple Computer.

**Tom Volotta** is the founder of Volotta Interactive Video, a multimedia design, production, and programming firm in the San Francisco Bay area. He is a pioneer in the field and has developed a number of educational and entertainment products. Among the SIGGRAPH community he may be best known for his work with Rob Wolff of Apple Computer in developing the *Mars Navigator* project, a pioneering work that allows a user to control a surface fly-by of Mars and interrupt the fly-by to explore a number of aspects of the planet's topography, geology, and other features.

### *Credits*

We want to thank Disc Manufacturing, Inc. and their staff members Steve Langer and Breck Rowell for their contributions to the SIGGRAPH 94 course whose notes were the kernel around which this course took shape, and for their assistance in providing technical reports and detailed information used in these notes. Full technical reports and a CD-ROM with further information are listed in the references and are available from the company at the address below.

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**References**

## **Preface**

This course grew out of the authors' experience in creating electronic publications for CD-ROM distribution. We wanted to share our experiences with the community: what is easy and what is difficult, what is inexpensive and what is costly. We also wanted to give the reader an outline of what you have to deal with at each stage of the CD-ROM publishing process, from developing the concept to manufacturing and distributing the discs. Some of these are common to all disc projects and have well-developed answers, and we try to cover those areas pretty fully, but some are areas that are unique to each disc project, and for those we can do no more than discuss options with some examples from particular projects. We hope this course will help you understand the process of creating your own CD-ROM publications, adding to the richness of information available in this format.

These notes are part of a manuscript that Steve Cunningham and Judson Rosebush will publish with O'Reilly & Associates in late 1995. This forthcoming book is listed in the References section.

We would like to thank Richard Bowers, of the Optical Publishing Association, for his assistance with several of the resource listings, and Christopher Warnock, Adobe Systems, for help with the SIGGRAPH disc projects that are referenced in these notes.

We particularly want to thank Disc Manufacturing, Inc. and their staff members Steve Langer and Breck Rowell for their contributions to the SIGGRAPH 94 course which was the precursor of this SIGGRAPH 95 course, and for their assistance in providing us with their technical reports and a number of detailed pieces of information used throughout these notes. Full technical reports and a CD-ROM with further information are listed in the references and are available from the company

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Applelink: DMI.CD

We also want to thank Kaleida, Inc. for permissions to use ScriptX examples in these notes and Howard Metzenberg and Janet Byler for providing these examples.

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