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Interactive Techniques**

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COURSE NOTES

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**GENERATION OF THREE-
DIMENSIONAL DATA FOR
COMPUTER IMAGE
SYNTHESIS**

Co-Chairs

**Wayne E. Carlson
The Ohio State University
Richard E. Parent
The Ohio State University**

Lecturers

**Wayne E. Carlson
The Ohio State University
Richard Parent
The Ohio State University
Kevin Weiler
Stardent Computer
Turner Whitted
Numerical Design, Ltd.**

Introduction to the Course Notes

Abstract: This course is designed to present the issues associated with generating the necessary geometric data necessary for complex computer generated images. The underlying foundations of geometric modeling are described, and a survey of model construction techniques is presented. The following collection of notes represents the contributions of the 4 speakers, and includes copies of presentation slides used by the speakers. Where appropriate, reprints of articles from the existing literature are included.

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Biographies of the Speakers

All of the speakers in this course have been active for many years in the Computer Graphics discipline, as educators, researchers, and practitioners. They have all made significant contributions to the area in the form of research publications, conference presentations, and activity in the ACM-Siggraph organization. All are actively working in the area of Geometric Modeling and the design of data to be used in Image Synthesis.

Richard Parent is an Assistant Professor in the Department of Computer and Information Science at The Ohio State University. He received a PhD in Computer Science from Ohio State in 1977. He was formerly the associate director of the Computer Graphics Research Group at Ohio State.

Wayne Carlson is an Assistant Professor in the Department of Computer and Information Science at The Ohio State University. He received a PhD in Computer Science from Ohio State in 1982. He was formerly Vice President of Research and Development at Cranston/Csuri Productions.

Kevin Weiler is the Director of Advanced Graphics at Stardent Computer. He received a PhD in Computer Science from Rensselaer Polytechnic University in 1986. He was formerly a senior scientist at General Electric Corporate Research and Development.

Turner Whitted is founder and Technical Director of Numerical Design, Ltd., and an Adjunct Associate Professor of Computer Science at the University of North Carolina. He received a PhD in Computer Science from North Carolina State University in 1978. He was formerly with the Computer Systems Research Laboratory of Bell Laboratories. Turner is the 1986 winner of the prestigious Computer Graphics Achievement Award, given by ACM-Siggraph in recognition of outstanding contributions to the discipline of computer graphics.