SIGGRAPH 97
24TH INTERNATIONAL CONFERENCE
ON COMPUTER GRAPHICS
AND INTERACTIVE TECHNIQUES

## COURSE NOTES

7

# Design and Application of Object-Oriented 3D Visualization Systems

ORGANIZER

Ken Martin

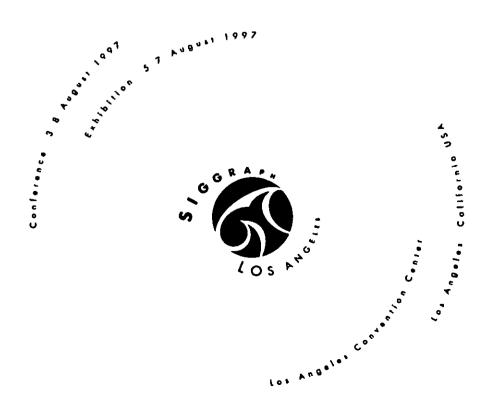
General Electric Corporate R&D Center

LECTURERS

Tom Citmniti Rensselaer Polytechnic Institute

William E Lorensen Ken Martin General Electric Corporate R&D Center

Tamara Munzner
Stanford University



# Course 7

# Design and Application of Object-Oriented 3D Visualization Systems

Sunday | Half Day | Intermediate

3D graphics and object-oriented systems have emerged as premier technologies to create flexible, extensible, and intuitive software applications. This course demonstrates how to design applications to take advantage of object-oriented techniques and methods in 3D graphics and visualization.

### Who Should Attend

Users, developers, and researchers of 3D graphics and visualization systems, or practitioners who want to employ graphics and visualization in their own applications

#### Lecturers

Ken Martin

General Electric Corporate R&D Center

Tom Citriniti
Rensselaer Polytechnic Institute

Bill Lorensen Ken Martin General Electric Corporate R&D Center

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#### **Contents**

- Survey of Visualization System
- Object Oriented Visualization (systems vs toolkits
- Design Issues (data handling, performance
- OO Design Issues (scene graph vs OO)
- Make Your Own Visible Womar
- An OO/SceneGraph Hybrid (paper)
- Design of OO Visualization Toolkit (paper
- Creating Models From Segmented Images (html
- VTK and Renderman (html