



**SIGGRAPH 1994**

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On Computer Graphics and  
Interactive Techniques*

*Orange County Convention Center  
Orlando, Florida  
July 24-29*

## Course Notes

# 30

**THE OpenGL  
GRAPHICS INTERFACE**

*Organizer*

Randi J. Rost  
Kubota Pacific Computer, Inc.

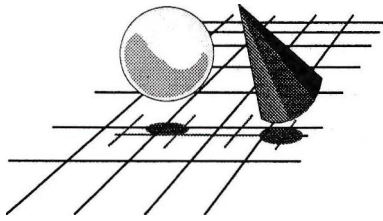
*Lecturers*

Kurt Akeley  
Silicon Graphics, Inc.

Bruce D'Amora  
IBM Corporation

John Dennis  
Digital Equipment Corporation

George Roussos  
Microsoft Corporation



# The OpenGL Graphics Interface

**SIGGRAPH '94**

Course Notes

*Randi J. Rost*

*Kurt Akeley*

*John Dennis*

*Bruce D'Amora*

*Hock San Lee*

*George Roussos*

Course Number: 30  
July 25, 1994

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# Course Syllabus

8:30 - 8:45	Randi Rost	Introductions and logistics
8:45 - 9:15	Kurt Akeley	OpenGL Overview
9:15 - 10:30	Bruce D'Amora	OpenGL Basics
10:30 - 10:45	morning break	
10:45 - 12:00	Randi Rost	OpenGL Rasterization
12:00 - 1:30	lunch	
1:30 - 2:45	Kurt Akeley	OpenGL Framebuffer Operations
2:45 - 3:15	John Dennis	OpenGL API Wrap-up
3:15 - 3:30	afternoon break	
3:30 - 4:00	John Dennis	Integrating OpenGL and X
4:00 - 4:45	George Roussos Hock San Lee	Integrating OpenGL and Microsoft Windows/NT
4:45 - 5:00	All	Questions, wrap-up, contingency

# The OpenGL Graphics Interface

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## **Abstract**

Graphics standards are receiving increased attention in the computer graphics community as more people write programs that use 3D graphics and as those already possessing 3D graphical programs want those programs to run on a variety of computers.

OpenGL is an emerging graphics standard that provides advanced rendering features while maintaining a simple programming model. Its procedural interface allows a graphics programmer to describe rendering tasks, whether simple or complex, easily and efficiently. Because OpenGL is rendering-only, it can be incorporated into any window system (and has been, into the X Window System and the soon-to-be-released Windows NT) or can be used without a window system. Finally, OpenGL is designed so that it can be implemented to take advantage of a wide range of graphics hardware capabilities, from a basic framebuffer to the most sophisticated graphics subsystems.