

# EXPERIENTIAL COMPUTER ART

## COURSE # 7

### **CHAIR:**

***Lucy Petrovich***  
*University of Wisconsin*

### **SPEAKERS:**

***Myron Krueger***  
*Artificial Reality Corporation*

***Dave Rokeby***  
*Independent Consultant*

***Dan Sandin***  
*University of Illinois*

***Tom DeFanti***  
*University of Illinois*

***Alan Rath***  
*Independent Consultant*



ACM SIGGRAPH

89

*Boston, Massachusetts*

*31 July - 4 August 1989*

# TOPICS

- \* Introduction Lucy Petrovich
- \* Introduction to "Very Nervous System" David Rokeby
- \* In depth look at the Language ("IntAct") David Rokeby
- \* Design constraints for systems Thomas DeFanti
- \* Systems artist programmers can deal with Thomas DeFanti
- \* Interactive Image Daniel Sandin
- \* "Fractals: Complex Images From Simple Rules" Daniel Sandin
- \* Information Systems Alan Rath
- \* From Physical to Virtual Alan Rath
- \* Interactive Environments Myron Krueger
- \* Artificial Reality Myron Krueger
- \* VIDEOPLACE Myron Krueger

## **BIOGRAPHICAL SKETCH**

### **David Rokeby**

**David Rokeby is a visual artist, composer, writer, and designer of software and hardware. He evolved his interactive system as a way of integrating his disparate interests in visual art, dance, music, electronics, and philosophy. He first began working in this medium while taking artistic instruction at the Ontario College of Art. His work has been exhibited in shows across Canada, in the United States and in Europe, including the SIGGRAPH '88 Art Show and the Venice Biennale in 1986. He was awarded the first Petro-Canada Award for media arts in 1988.**

## **EVL FACULTY BIOGRAPHICAL SKETCHES**

### **Thomas A. DeFanti**

Thomas A. DeFanti, PhD, is Co-director of the EVL; Professor of Electrical Engineering and Computer Science in the Department of Electrical Engineering and Computer Science in the UIC College of Engineering; and an Adjunct Professor at the National Center for Supercomputing Applications. DeFanti is an international lecturer and author in the computer graphics field; has had many interactive installations in museums and conferences worldwide; serves on the editorial boards of several publications; is Past Chair SIGGRAPH, the international computer graphics educational society; is Editor-in-Chief of its publication, the SIGGRAPH Video Review; and, most recently, was Vice Chair of the Panel on Graphics, Image Processing and Workstations sponsored by the National Science Foundation, and Co-editor of its report Visualization in Scientific Computing.

### **Daniel J. Sandin**

Daniel J. Sandin is Co-director of the EVL; Professor of Art in the UIC School of Art and Design; an Adjunct Professor at the National Center for Supercomputing Applications; and Director of Computer Graphics at (Art) Laboratory. His early interest in computer graphics / video image processing and interactive computing environments motivated his pioneering work in video synthesizers and continues to influence his research efforts in the field of 3D psychology today. Sandin's computer / video art has been exhibited worldwide and has received many awards; he has received many grants and fellowships from such distinguished organizations as the Rockefeller Foundation, the Guggenheim Foundation and the National Endowment for the Arts; and, he has work included in the inaugural collection of video art at the Museum of Modern Art in N.Y.

## **BIOGRAPHICAL SKETCH**

### **Alan Rath**

**(b. 1959, Cincinnati, OH) received a degree in Electrical Engineering from the Massachusetts Institute of Technology in 1982. He lives and works in Oakland, California where he builds sculpture out of the contemporary industrial materials provided by Silicon Valley. His work has been recently exhibited at the Everson Museum, Syracuse, New York; the IBM Gallery, New York; New Langton Arts, San Francisco; The San Francisco Museum of Modern Art; The Badischer Kunstverein, Karlsruhe, West Germany; Los Angeles Contemporary Exhibitions; and the Museum Folkwang, Essen, West Germany.**

**In 1988 he received a Fellowship Grant in Sculpture from the National Endowment for the Arts. In 1989 he received an Artspace Sculpture Grant from Artspace, San Francisco and a Grant for Interdisciplinary Artist from New Langton Arts, San Francisco.**

## **BIOGRAPHICAL SKETCH**

**Myron W. Krueger**

**Dr. Krueger received a BA in Mathematics from Dartmouth College and an MS and PhD in Computer Science from the University of Wisconsin, Madison. For the past 20 years he has been developing a new art medium based on the computer's most unique feature: its ability to respond in real-time.**

**VIDEOPLACE, the current embodiment of this medium, was first simulated in 1970. The ideas underlying VIDEOPLACE are the subject of his book, Artificial Reality, (Addison-Wesley 1983.)**

**VIDEOPLACE has been exhibited at art museums and galleries, scientific conferences and science museums and has been the subject of numerous international newspaper and magazine articles. It has also received national and international television coverage.**

## **SPEAKERS**

**Lucy Petrovich**  
**Department of Art**  
**University of Wisconsin - Madison**  
**6241 Humanities Building**  
**Madison, Wisconsin 53706**  
**608-437-5610**

**David Rokeby**  
**3349 A Spadina Avenue**  
**Toronto, Ontario**  
**Canada M5T 2G3**  
**416-5596-1428**

**Thomas DeFanti**  
**Daniel Sandin**  
**Electronic Visualization Laboratory**  
**Electrical Engineering and Computer Science Department**  
**University of Illinois at Chicago**  
**Box 4348**  
**Chicago, Illinois 60680**  
**312-996-3002**

**Alan Rath**  
**1828 Goss Street**  
**Oakland, California 94607**  
**415-452-2999**

**Myron Krueger**  
**Artificial Reality Corporation**  
**P.O. Box 786**  
**Vernon, Connecticut 06066**  
**203-871-1375**

# **"Very Nervous System"**

**David Rokeby**



## **Outline of Presentation**

- I. **Demonstration of installation, "Very Nervous System"**
  
- II. **Basic description of the hardware and software involved**
  - A. **In depth look at the language ("IntAct") developed for the system**
  - B. **A look at the conceptual model that it is built on**
  
- III. **Challenges of designing environment/compositions**  
**(Valuable approaches)**
  
- IV. **Some applications in which the system has been used**
  
- V. **Applications under development**
  - A. **Applications in installation**
  - B. **Performance**
  - C. **In conjunction with the handicapped**  
**(Video clips to illustrate some of these applications)**
  
- VI. **Questions and further demonstrations**