

# L.A. SIGGRAPH

Los Angeles ACM / Special Interest Group on Computer GRAPHICS

MARCH 1985

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## UPCOMING MEETINGS March



SILICON GRAPHICS, INC.

For our March meeting, we will again return to Baxter Lecture Hall, room 3400, at California Institute of Technology. We will feature Silicon Graphics, a leading-edge, high-technology company in the computer graphics arena.

Caltech is located at 1201 East California Blvd. in Pasadena. If you are coming to Pasadena on the 210 Freeway, take the Hill Ave. exit south to Del Mar Blvd. If you are coming up on the Pasadena Freeway, stay with it as it becomes Arroyo Parkway and go north about a mile, to Del Mar Blvd., where you should make a right. Caltech is about 2 miles east. The best parking lot to use is directly south of the intersection of Del Mar and Chester Ave. Use the south entrance of the Baxter Hall of Humanities, which is located on the east side of the lawn, which is directly south of the Beckman Auditorium (a big, white, round building). SEE THE MAP.

Baxter Lecture Hall is at the top of the flight of stairs, just inside the entrance. LA SIGGRAPH would, once again, like to thank Drs. Jim Kajiya and Al Barr, of Caltech's Computer Science Department, for making this facility available.

A social hour will begin at 6:30 pm, and the program starts at 7:30 pm. There will be a \$1.00 fee for members, and \$3.00 for non-members, payable at the door. Please bring correct change as we have a hard time making change for large bills.

Silicon Graphics will be showing us the latest in real-time, 3-D raster graphics. S.G. is already well-known for its first entry in the market with the IRIS 1000-Series, which provides high-speed, geometric graphics processing using the Geometry

Silicon Graphics will now demonstrate its new generation of products. These exhibit extensive upgrades in the rendering capabilities of the system, including Gouraud shading, Z-buffer hidden surface removal and micro-coded depth cuing of wire-frame models.

Also on display will be a dynamic Window Manager for the product, allowing update of several windows on the screen at the same time, each displaying three-dimensional graphics with rotate, pan and zoom capabilities. This capability is unique in the industry.



California  
Institute  
of  
Technology

## MEETINGS CONTINUED

The IRIS (Integrated Raster Imaging System) is a high-performance, high-resolution color computing system for 2D and 3D computer graphics. It provides a powerful set of graphics primitives in a combination of custom VLSI circuits, conventional hardware, firmware and software.

The IRIS Terminal, or workstation, is a graphics system consisting of a general-purpose microprocessor, the Geometry Engine system, a raster subsystem, a high-resolution color monitor, keyboard and graphics input devices. The IRIS Workstation runs the UNIX<sup>tm</sup> Operating System, and can operate with or without a local disk. The various IRIS system configurations make it an extremely versatile high-speed graphics workstation.

The IRIS can communicate with another computer either through an Ethernet interface or an RS232 serial line. Any arrangement of IRIS Terminals, IRIS Workstations, remote computers and file servers is possible. Multiple terminals can communicate with one host (similar to a conventional timesharing system), one terminal can communicate with multiple hosts, workstations with network connections can work in stand-alone mode and files can be shared on a file server.

The heart of the IRIS is the Geometry Engine, a custom VLSI chip developed by Dr. James Clark at Stanford University. The Geometry Engine accepts points, vectors, polygons, characters and curves in a user-defined coordinate system. It transforms them into screen coordinates with arbitrary rotations, scaling and other transformations. The Geometry Engine system performs 2D and 3D floating point transformations, clipping and mapping of graphical data to the screen at a rate in excess of 65,000 coordinates per second.

The hardware is useful in a wide variety of applications including simulation, animation, robotics, CAD, solids modeling, molecular modeling, curve and surface design, VLSI layout, schematics, geophysical studies, medical imaging and document preparation.

## APRIL

The April 9th meeting will be hosted at 7:30 pm, by Digital Productions, creators of very hi-res, film quality Digital Scene Simulation<sup>sm</sup>; produced using the Cray X-MP super computer. A recent example of their work is the Jupiter animation for the motion picture "2010."

## MAY

The May meeting on the 14th, will find us once again at Caltech at 7:30 pm, for a program presented by Greg Passmore. Topics to be covered include image synthesis, software systems integration and hardware configurations which are best suited to image synthesis.

## FUTURE MEETINGS

In the future, we will be presenting demonstrations of the latest from Apple Computer, Inc. and the

## ANNOUNCEMENTS

\* \* \* SIGGRAPH '85 \* JULY 22-26, 1985 \* \* \*  
Moscone Center, San Francisco:

The SIGGRAPH '85 Art Show will feature interactive computer graphics installations and displays of drawings, lithographs, murals, constructions, photographs, sculpture, ceramics, textile and fiber art and environments for viewing videotapes and framebuffer imagery.

The deadline for submission of proposals to the SIGGRAPH '85 Art Show is March 15, 1985.

Artists may also enter their work in the Film and Video Show. The entry deadline for the Film and Video Show is April 17, 1985.

A guide for participating artists and entry form is available from your local SIGGRAPH chapter. Contact ERNIE SASAKI at (818) 577-2643 or leave a message for RANDY RANDALL at (213) 394-7408.

\* \* \* AV VIDEO MAGAZINE HOLDS C.G. CONTEST \* \* \*

AV Video magazine is holding a computer graphics contest to encourage computer use in design. The contest theme will be the "Audiovisual World." The grand-prize-winner's entry will be featured as the cover design for the July 1985 issue and a write-up will feature the winner. The July issue will also be prominently displayed in the AV Video booth at SIGGRAPH '85. In addition, valuable prizes will be awarded to the winner and runners-up. Transparencies or hard-copy will be considered.

All submissions must be postmarked no later than midnight, April 1, 1985. Entries, or inquiries, may be sent to AV Video, "Contest," 25550 Hawthorne Blvd., Suite 314, Torrance, CA 90505.

\* \* \* SHOW BIZ EXPO '85 \* JUNE 27-29, 1985 \* \* \*  
Santa Monica Civic Auditorium

I was a participant at The Micro Show, held last year. That event, produced by Live Time Inc., was a forerunner to this year's Show Biz Expo '85. The event last year was one of the best small computer shows I've ever visited, in terms of addressing the particular needs of the entertainment industry.

Live Time Inc. is interested in presenting examples of computer graphics at this year's expanded show. They also publish a catalogue of entertainment industry software. If you wish to be informed of exhibition details or software catalogue criteria, drop me a note or give a call. RANDY RANDALL, 320 Wilshire blvd., Suite B-3, Santa Monica, CA 90401, (213) 394-7408. If you write, please include the suite number. If you call, please leave a message including your name, phone number and the nature of your interest.

\* \* \* ATTENDING EXECUTIVE COUNCIL MEETINGS \* \* \*

SIGGRAPH members who wish to contribute to a meeting of the executive council (held the third week of each month), may contact any executive council member listed on the front page masthead of the newsletter. Your views are always welcome and we will feed you a coke and a carrot stick (WITH DIP!)

# NEWSLETTER NEWS

- Thanks to MIKE AMRON for his help with the paste-up of the newsletter. I will be contacting others who have expressed interest in helping, thanks! Greater input from our members will allow more time for the production of a professional looking paper with more information of value.

- Future issues will describe film & video image recording techniques, CAD systems under \$20,000, bit-pads and other data entry devices, parallel processing & more on optical disks. If you have experience in any of these areas, please call, (213) 394-7408. RANDY RANDALL.

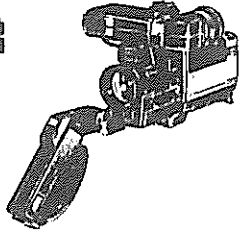
- **Ada**  
Professional  
Development  
Seminar

- March 16, 1985, 7:30 a.m. - 5:30 p.m.



Sponsored by Orange County ACM & L.A. ACM SIG Ada. The location is Inn at the Park, 1855 South Harbor Blvd., Anaheim, CA. Program arrangements: MIKE HOGAN, (213) 615-4346 & NANCY KIM, (714) 632-5651. Registration: JUDY SINDEL-DORSEY, (213) 922-0260.

## COMPUTER VIDEO SYSTEMS



\* \* \* THE ED AND MARCI T.V. SHOW \* \* \*

LA SIGGRAPH member Marci Javril and computer/video artist Ed Tannenbaum will be showcased April 10th on a National Geographic TV special on Computers. Portions of their rehearsal, performance & interviews will be broadcast in a ten minute segment. The P.B.S. event will be seen locally on WQED at 8:00 pm. Ed and dancer Marci Javril work improvisationally with music, using a realtime interactive video system invented by Tannenbaum.

Live performances will also be presented April 12 at the California Museum of Science and Industry. Contact PHILIP HIMBERG at the Live Program Office, (213) 744-7516, for details.

\* \* \* LOW COST VIDEO AND COMPUTER GRAPHICS \* \* \*

LA SIGGRAPH member Debby Winsberg will be teaching a class, in association with Joe Leonardi, at the Long Beach Museum of Art Video media center. The subject is "Low Cost Electronic Graphics For Video."

This overview, demonstration course presents a multi-faceted approach to creating low cost electronic graphics for video. Traditional flat artwork, photos, video camera and videotape images, the Chyron VP-1 character generator, digital time-base correction techniques and the processing capabilities of the Apple II computer are combined to produce a great variety of graphic arts presentations.

The Long Beach Museum of Art's media art center program has contributed to local video production and training since 1975. It has provided resources for production and post-production, promoted the dissemination of information and hosted exhibits by artists and independent video producers.

L.B.M.A. Video is a focal point for the medium in southern California. The Station/Annex houses broadcast quality production equipment and 3/4 inch post-production studios. It conducts workshops and lends technical assistance to artists and regional art organizations. The workshops touch a wide range of people, from students to independent artists to professionals. The organization is run by

Originally, L.B.M.A. Video was housed in the Long Beach Museum of Art building, and was funded by the National Endowment for the Arts. In 1980, they moved to their present location, a separate building, and are now additionally funded by the Rockefeller Foundation, the California Arts Council, the City of Long Beach, the Art Museum Alliance Video and Film Council and private contributions.

The constant goal is to perpetuate and promote innovative and creative use of video. To further this goal, the following courses are offered:

"Low-Cost Electronic Graphics for Video,"  
April 6, Joe Leonardi and Debby Winsberg

"Hands-On Workshop for Beginners," in Video  
March 16, 23, 30 / May 18, 25, June 1,  
Joe Leonardi and Art Nomura

"1/2 Inch Video, Intermediate /  
Experimental Production and Post-Production"  
May 11, Joe Leonardi and Art Nomura

"1/2 Inch Home Video Documentary"  
April 13, 20, Tom Nickolson

"Experimental Video / A Hands-On Approach"  
April 21, 28, May 5, Joe Leonardi

"Editing Techniques / Intermediate 3/4 Inch Format"  
March 31, Brenda Miller

"The Three Tube Camera"  
April 27, Tom Piglin

"Scriptwriting"  
May 4, Sandra Holden

For further information, contact Joe Leonardi or Art Nomura at LBMA Video, Station / Annex, 5373 E. Second Street, Long Beach, CA 90803 (213) 439-0751. DEBBY WINSBERG.

## EXPORT UPDATE

According to Hardcopy magazine, the Commerce Department has slapped stiff controls on Digital Equipment Corp. products in an effort to prevent its computers from making their way into the hands of Eastern Bloc nations. The move comes several months after a VAX-11/782 was seized en route to the Soviet Union. A New York Times article reveals that DEC must go through the time-consuming task of obtaining individual export licenses in order to ship to West Germany, Norway or Austria. Those countries are considered prime "diversion points" for smuggling. GREG PASSMORE.

In a recent development, the L.A. Times reported that a pact between American and Austrian customs agencies is in trouble because of a turf war between U.S. Customs and the Commerce Dept. Commerce

# COMPUTER GRAPHICS CLASSES

## UCLA EXTENSION BEGINS

### \* \* NEW COMPUTER GRAPHICS CERTIFICATE PROGRAM \* \*

Beginning this spring, UCLA Extension's Visual Arts Program will offer a new certificate program in computer graphics. The program, consisting of 14 courses that can be completed in approximately one to two years, will train students in the use of computers for visual communication and will provide updated information and an overview of future developments in the field, including hardware, software and employment trends.

"The field of computer graphics is changing the course of visual communication," says Ruth Iskin, program specialist, UCLA Extension Department of the Arts. "Its impact is being felt by a wide range of fields from business graphics and the print media to motion graphics including television commercials, music video and film.

"Also," she adds, "the role and scope of the computer graphics designer is expanding with increasing availability of economically accessible hardware and software."

The new certificate program is designed to meet the needs of both advanced and beginning level graphic designers, and courses are taught by leading professionals with many featuring guest speakers representing a broad range of specialties within the industry. The courses offered in the Spring Quarter, that are applicable to the program, include:

#### Prerequisites:

"Drawing with Felt-tip Markers for Beginners,"  
Mondays, April 1 - June 10

"The Basics of Graphic Design: Form, Structure and Composition,"

Tuesdays, April 2 - June 11

"Foundation Drawing I," Thursdays, April 4-June 13

#### Required (Beginning):

"Graphic Design: An Introduction to the Use of the Computer,"

Wednesdays, April 3 - June 5

#### Required (Intermediate):

"Motion Graphics for Film and Video,"

Mondays, April 1 - June 10

"Graphics: Microcomputer Software Packages for the Graphic Designer,"

Tuesdays, April 2 - June 11

#### Electives:

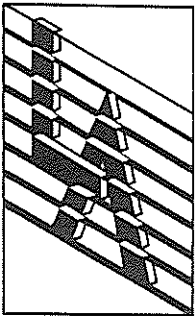
"Computer-Aided Design/Graphics: A Hands-on Course for Graphic Designers, Interior Designers, Architects and Landscape Architects,"

Mondays, April 1 - June 10

"CAD for Graphic, Product and Industrial Design: A Hands-on Class,"

Tuesdays and Thursdays, April 2 - May 9

Interested persons can learn more about UCLA Extension's Certificate Program in Computer Graphics by attending an open house, Sunday, March 10, beginning at 10:30 am, at 216 E. Dickson Art Center, UCLA. For more information, please phone (213) 206-8503. JOAN CHIN.



S I G G R A P H

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Los  
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