

L.A. SIGGRAPH

Los Angeles ACM / Special Interest Group on Computer GRAPHics

JANUARY 1985

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UPCOMING MEETINGS January

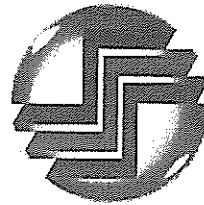
Our January meeting will feature graphics demonstrated by Omnibus Computer Graphics Center, Inc. The meeting will be held on January 8th at the California Institute of Technology's Baxter Lecture Hall, room 3400.

Caltech is located at 1201 East California Boulevard in Pasadena. If you are coming to Pasadena on the 210 Freeway, take the Hill Avenue exit south to Del Mar Boulevard. 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 Boulevard, 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 Avenue. 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 Beckman Auditorium (the big, white, round building). SEE THE MAP. Baxter Lecture Hall is at the top of the flight of stairs which you will find 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 possible the use of this facility.

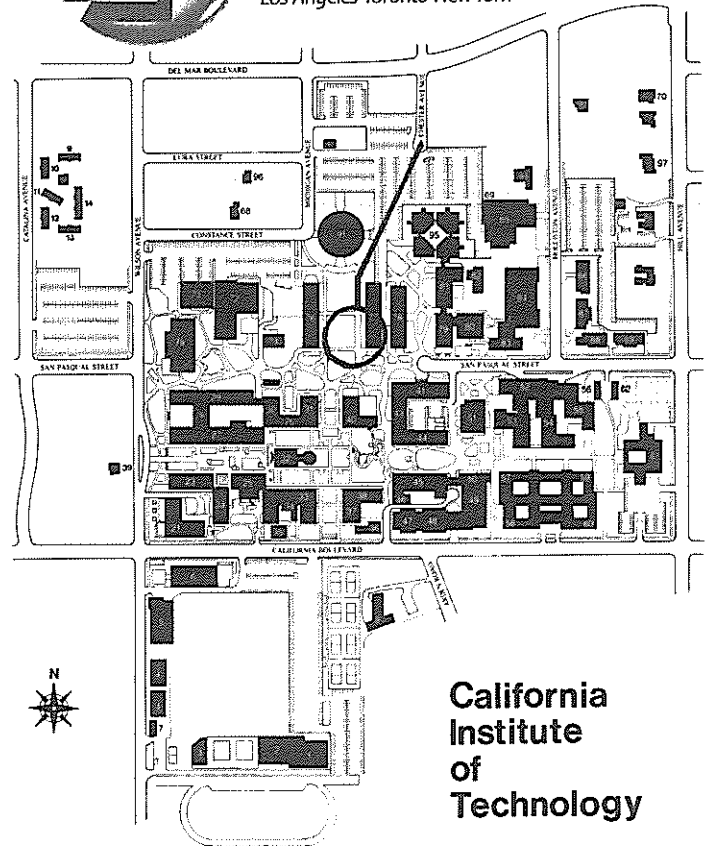
A social hour will begin at 6:30 pm, and the program at 7:30 pm. There will be a \$1.00 fee for members, and \$3.00 for non-members, payable at the door. Please bring the exact amount as we have a hard time making change for large bills.

Omnibus, a design-oriented computer graphic company, recently relocated at Paramount Studios in Hollywood, creates top quality computer animation for the entertainment and advertising industries. Designer/director, Art Durinski, and head of programming, Rick Balabuck, will discuss the process of creating and animating images with Omnibus' technology.

John Penny, Omnibus President, describes the goals of Omnibus as follows: "We want to develop more user friendly ways for artists and designers to create artificial realities. It's not the hardware or the software that makes or breaks a company, but what images are turned out." This philosophy shows clearly in the pieces produced by Omnibus.



OMNIBUS
Computer Graphics Center Inc
Los Angeles Toronto New York



**California
Institute
of
Technology**

The company has an unusual structure. It is one large company in three places: New York, Toronto and Los Angeles. Each location has a different speciality and all three share resources via satellite. The Los Angeles branch uses Information International, Inc. software, as used in Tron, and in-house proprietary software to develop hi-res 3-D animation for film. The New York branch uses N.Y.I.T. and Evans & Sutherland software to develop both video and film images. Toronto is the only office authorized to use the Robert Abel, Inc. software purchased by Omnibus.

MEETINGS CONTINUED

ANNOUNCEMENTS

February

The February meeting, of course, is "ON THE THRESHOLD" at The Palace, February 12th at 7:30 pm. This is our multimedia showcase, held in cooperation with the Independent Composers Association, the Visual Music Alliance and Laser Media. Computer graphics artwork will still be accepted for consideration, the deadline is near. Volunteers are always welcome. Tickets will go on sale January 15th at \$12.50. They will be available from LA SIGGRAPH (see order form elsewhere in this issue), The Palace and Ticket Master.

March

For the March meeting, we will again return to Caltech on the 12th at 7:30 pm. We will feature Silicon Graphics, a company which has implemented their own proprietary V.L.S.I. chip as a geometry engine. It provides ultra-hi-speed coordinate transformation and matrix multiplication. It was developed at Stanford by Dr. Clark. He started the company three years ago. Their system is called the Iris system, a Unix/Ethernet environment capable of real-time rendering of simple models. The applications are animation, limited simulation, CAD and scientific research.

April

The April 9th meeting will be hosted, at 7:30 pm, by Digital Productions, creators of very hi-res, film quality solid modeling; produced using the Cray X-MP super computer. The latest example of their work is the Jupiter animation for "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.

ANNOUNCEMENTS

WE HAVE RECEIVED MANY COMMENTS ABOUT THE NEWSLETTER, over the last few months. Thankfully, most have been favorable; it helps to make the long nights worth-while. There are two comments I would like to discuss. First, "the newsletter comes out too late." There have been problems in the past with our updated mailing list from ACM and with the scheduling of upcoming meetings. We also face a difficulty because there is very little time between the Executive Council meeting (when much of the newsletter material is presented) and our printing deadline. In this issue, you will find a schedule of events thru May. If you are unsure about the location or planned events for an upcoming meeting, and you have still not received a newsletter during the first week of the month, please call one of your officers for directions. We are here to help.

The second comment is a complaint that our activities have taken a swing toward the artistic and away from the engineering side of computer graphics. This is a valid point. I have encouraged you, the members, to fill out and mail the questionnaire on the back of the December newsletter. We need to know who our members are and what they want. Preliminary results of our surveys indicate a bias, in our local membership, toward the artistic side of c.g. However, efforts have been made to locate engineering speakers. Most have had facilities too small to accommodate our growing membership. Our recently aquired meeting locations at Caltech and U.C.L.A. should solve that problem. Several newsletter articles, of a technical nature, have been proposed or are under development. However, the authors have not had the time to complete them due to end of the year pressures. You will be seeing more in '85. Technical forums outside of the format of our monthly general meetings have also been discussed. If you have any thoughts, contacts for meeting speakers and articles, or other contributions, don't hold back! Let us hear from you. RANDY RANDALL.

NEWS ITEM: Graphics Export Considerations

Sales of computer graphics software and specialized hardware to foreign countries has continued to accelerate over the last few months. The Reagan administration prompted new export controls over these technologies. Restrictions have been defined by the Coordinating Committee for Multilateral Export Control, based in Paris, in cooperation with the U.S. Department of Defense.

The key points require obtaining permission for the foreign sale of graphics software, almost all personal computers with performance equal or greater than a I.B.M PC-XT or hardware designed for vibration, heat and shock environments. These new regulations absolutely ban the export of any hardware or software which aids in the design of other hardware or software. In a similar decision, U.S. Customs requires the licensing of any hardware or software taken out of this country, in person, with a value in excess of \$1000. This includes most portable systems for personal use and test equipment. The government is really taking this seriously, with stiff fines and possible prison terms for those who fail to acquire government permission. Be alert! GREG PASSMORE.

WE HAVE A SYSTEM CRASH! Will the person who sent in a questionnaire and indicated an interest in helping with the newsletter please give a call to either Ernie Sasaki at (818) 577-2643 or Randy Randall at (213) 394-7408. When ACM forwarded your questionnaire, they did not enclose the envelope and there is no information on the questionnaire. You are a mystery, we have no name, address or phone number. We have a "device not present" error. RANDY RANDALL.

COMPUTER ANIMATION: WORLDS OF ILLUSION

January 28

8 pm, Mark Goodson Screening Room, American Film Institute Campus, 2021 North Western Av, Los Angeles, call (213) 856-7787 for reservations.

"The representation of human movement is a major challenge to computer-graphics artists. Rebecca Allen of the New York Institute of Technology Computer Lab will speak on 'Computer Animation: Worlds of Illusion'. Allen's computer-animated figures have played important roles in many music video pieces and in Twyla Tharp's dance video

the PALACE

FOR SALE: Tickets to our showcase at the Palace. Title: "On The Threshold". Price: \$12.50. Where: send a check payable to "On The Threshold" to Nancy Collier, 11926 Santa Monica Blvd., Los Angeles, CA 90025. Purchase may also be made from any Ticket Master location. When: Event is February 12th at 7:30 pm. Tickets go on sale January 15, 1985. Bring your friends, see you there!

FOR SALE: Raster Technologies Model One/20 with 512x512x24 bit resolution. Includes all interfaces for DR11W, IEEE488 & RS232. & Conrac 7211 19" color monitor. Near new, 100 hrs of use, \$10,500. Also a Data Copy Series 300CCD image digitizer, 2500x1700 res, \$5000. GREG PASSMORE, (213) 373-2998.

FOR SALE: Womens' silver-on-black LA SIGGRAPH tee-shirts are still available. Price is \$8.00 & they look terrific. See Ed Kramer at the Jan. meeting.

WANTED: COMPUTERS ON THE STARS. If you have info about the use of computer imaging in the field of astronomy, please contact RANDY RANDALL at 320 Wilshire Blvd., Suite B-3, Santa Monica, CA 90401. Or call & leave message at (213) 394-7408.

NEED 128 GIGABYTES OF ONLINE MEMORY?

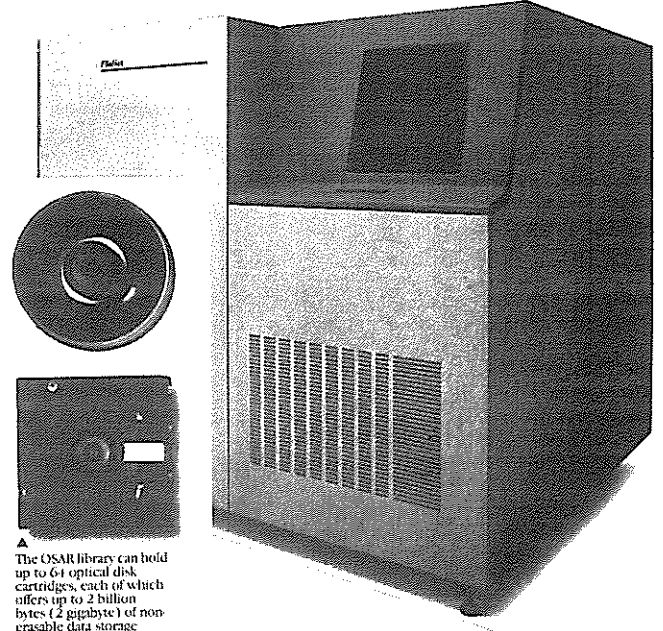
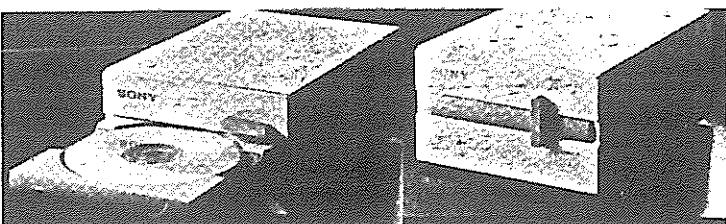
The above headline may sound like a forecast from Omni magazine, but it is not. I have seen such a system; it occupies only 25 square feet of space, and is available for delivery now. As you may have guessed, I am talking about an optical disk memory device (write once, read only). Such hardware is now finding its way into the market place. It should have quite an impact on computer graphics, both for storage and retrieval of large, complex program overlays as well as storage of very hi-res graphics images.

Two products will be discussed here. One is the File Net OSAR Library (Optical Storage and Retrieval). The other is the Sony Corp. CD ROM disk (Compact Disk, Read Only Memory), introduced at Comdex. Both systems use a laser to read permanent data burned onto a disk.

The Sony offering, the CDU-1 read only drive will be sampled in the first quarter of 1985. At that time, Sony will detail its plans to offer CD ROM disk duplication systems to outside parties.

Each CD ROM disk is broken up into a series of 2-Kbyte blocks of data. There are 270,000 blocks, for a disk total of 540 Mbytes. 75 blocks per second (150Kbytes) is the quoted data transfer rate. While the price has not been disclosed, Sony has indicated that the new drive will cost about three times as much as a traditional floppy disk drive. This would mean about \$200 to \$300 per drive in moderate quantities. The media should drop in price to compete with 5 1/4" floppies. 3M Co. and North American Philips have also indicated they will offer CD ROM media.

The disk system being offered by Sony is hardware only. An OEM manufacturer would have to provide the disk controller and interface. N. V. Philips has also announced a read-only drive for delivery in the first quarter of 1985, with a tentative price of \$1000.



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The OSAR library can hold up to 64 optical disk cartridges, each of which offers up to 2 billion bytes (2 gigabyte) of non-erasable data storage.

File Net offers a complete, high end, system of document-image processing. Although designed for storage and user access of business documents, this system demonstrates how optical disk technology could be used for other applications such as CAD, cartography and advertising layout.

The system includes an image digitizer with a resolution of 1700x2600 or 3400x5600. This information is captured to a file and written permanently to the optical disk. An immediate verify is performed and the information is rewritten to a new disk area if an error is detected. The disk is 12" tempered glass in a cartridge. Up to 64 disks may be loaded at once, any one of which may be removed from storage, brought up to speed and data accessed in a maximum of 12 seconds. All automatically.

Each disk can hold up to 2 gigabytes of data. With 64 disks in the OSAR Library, 128 billion bytes of data are available. If this isn't enough memory for you, 8 libraries may be linked together to provide 1,024,000,000,000 bytes of data with 12 second access to any file.

Four disks may be played simultaneously in each library with an average access time of 200 milliseconds. Data transfer occurs at 328 Kbytes per second. RANDY RANDAAL

COMPUTER GRAPHICS CLASSES

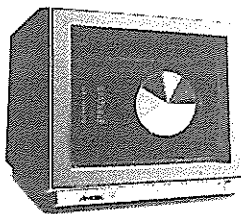
The following is a list of "Continuing Education" computer graphics oriented classes to be offered in the Spring Semester/Winter Quarter by Southland schools:

Cal State Long Beach, (213) 498-5471
Computer Graphics w/ Engineering Applications
Computer Graphics Workshop for Designers & Artists (CSLB Extension, (213) 498-5561)

Cal State Los Angeles, (213) 224-3521
Computers for the Artist & Designer
Advanced Computer Graphics

Cal State Northridge, (818) 885-1200
Computer Graphics and Design
Computer Graphics Applications

Golden West College, Huntington Beach, (714) 895-8731
Computer Graphics
Intro to CAD/Apple



Orange Coast College, Costa Mesa, (714) 432-5629
Intro to Computer Graphics
Color & design for Computer Graphics
Motion Graphics
Math Topics for Computer Graphics
Programming for Computer Graphics
Documentation for Computer Graphics
Photo Computer Graphics
Beginning CAD
Advanced CAD

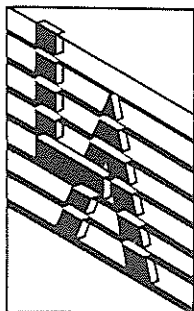
Otis/Parsons, Los Angeles, (213) 388-3129
Intro to Computer Graphics

Santa Ana College, (714) 667-3177
Computer Typesetting
Intro to Computer Graphics

UCLA Extension, (213) 825-9971
CAD/CAM for Graphic, Product & Industrial Design
Computer-Aided-Design/Graphics: For Graphics Designers, Interior Designers, Architects, & landscape Architects.
Graphic Design: Intro to the Use of the Computer
Intro to CAD/CAM

USC Continuing Education, (213) 743-4343 x120
Computer Generated Business Graphics
Careers in Computer Graphics

West Coast University, Los Angeles, (213) 487-4433
Computer Graphics Application Packages
Computer Graphics Programming for Artists & Designers
Computer Graphics Workshop
Survey of Computer Graphics



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