

SIGGRAPH

FEBRUARY '87

ASSOCIATION FOR COMPUTING MACHINERY
Los Angeles ACM / Special Interest Group on Computer GRAPHics
P.O. Box 90698, World Way Postal Center, Los Angeles, CA 90009



MEETING.....: WAVEFRONT TECHNOLOGIES.
IGDATE.....: Tuesday, February 10, 1986
IGCOORDINATES: UCLA, Moore Hall, Rm.100,
04 Hillgard, Westwood. Parking in lot 2 is \$3,
the meeting is \$1 for LA ACM / SIGGRAPH members
\$3 for nonmembers. Social hour with refresh-

At a time when computers are beginning to all
look alike, the difference will be software.
WAVEFRONT TECHNOLOGIES, a Santa Barbara based
software development company, will show the
current state of their 3-D animation software
and the impact that their turnkey system is

NEWSLETTER INFO - EDITOR, RANDY RANDALL.....: (213) 280-1179
 IMAGE PRODUCTION SERVICE, SUITE 400, THE FILMCORP BUILDING
 10000 Washington Blvd., Culver City, CA 90232

SIGGRAPH MEETING - SECOND TUESDAY OF EACH MONTH: FEBRUARY 10, '87
 NEWSLETTER DEADLINE: FRIDAY FOLLOWING MEETING...: FEBRUARY 13, '87
 MEMBERSHIP, MEETINGS & EVENTS INFO, SUGGESTIONS.: (213) 392-1074
 EXECUTIVE COUNCIL MEETING - 02/24/87 - TO ATTEND: (213) 392-1074

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is the monthly newsletter for the special interest group on computer graphics (SIGGRAPH) of the Los Angeles Chapter of the Association for Computing Machinery (ACM). An average monthly circulation of 1,066 reaches professionals, academicians and students with an interest in the use of computers to produce synthetic images and animation. Monthly meetings feature guest speakers and demonstrations representing the cutting edge of applied computer graphics technology.

ACM sponsors many other special interest groups and the many publications of ACM are among the finest and most up to date in the computer industry. For further information, contact any of the officers above or leave your name with the newsletter office at (213) 280-1179.

CONTINUED FROM FIRST PAGE: Wavefront Technologies is a software developer and system integration company specializing in high complexity graphic software for 3-D modeling, motion description and realistic rendering. Wavefront's focus is on interactive, artist/designer-oriented, off-the-shelf software and turnkey systems. The company provides modeling, motion description, realistic image rendering, and graphics production recording capabilities with their modular software packages.

Wavefront was founded in early 1984 by a team of young entrepreneurs including Bill Kovacs, former director of computer graphics development at Robert Abel & Associates in Hollywood.

himself as an authority in the advancing technology of three-dimensional modeling, motion design and image synthesis. Drawing on a background of six years experience in production and more than a dozen years in software development, Kovacs wrote Wavefront's code with the help of a team of computer graphics luminaries including Roy Hall, another Abel veteran from Cornell University, and David Yost, a systems developer and internationally known UNIX consultant.

In designing the system, Wavefront specifically focused on an open architecture approach, capable of inputting and outputting a wide variety of data in a creative and streamlined fashion. The code, written in C, is designed to be hardware independent, to take advantage of the hottest new computer devices.

Wavefront's initial market research indicated a strong need for a generic tool to model, preview and render the movement of three - dimensional objects in sequential frames. In addition to that tall order, it had to be artist/designer friendly. The result is a software system with a flexible, hierarchical database structure with unlimited user defined macros to allow setup of custom operating environments.

The company was acutely aware that computer graphics is no longer a tool that can be justified as a novelty. The output must show an increase in production capability and efficiency for the user. Wavefront's "Model," "PreView" and "Image" software was completed with these needs in mind.

"Model" provides the user with full 3-D object construction, 2-D digitizing, tablet input and object editing capabilities with features that include 3-D dynamic positioning and movement, tablet input of 3-D shapes with multiple viewports, and the input/output of additional binary data files for integrating other software.

"Preview" is for creating, editing and displaying 3-D motion; providing the user with interactive translation, rotation, scale and other user defined motion attributes. Features include multiple viewports for viewing dynamic events, an unlimited number of objects, cameras and light sources, extensive editing capabilities, 2-D graphing and interpolation of motion data, and transformation hierarchies necessary for robotics and human motion applications.

"Image" allows realistic scene rendering, designed to produce a wide range of images from simple graphics to highly realistic renditions of three-dimensional scenes. Features include multiple light sources, material properties, color, roughness, texture and transparency mapping, shading with geometric smoothing and specular highlights, variable spatial resolution, controllable anti-aliasing, and interface to a wide variety of user-defined input devices.

Wavefront currently supports the Silicon Graphics IRIS graphics workstations, GTCO, Hitachi and Calcomp digitizing tablets, Edge, Sun, Celerity, Pyramid and VAX computers for high speed processing, Raster Technology frame buffers, Lyon Lamb animation controllers, and Sony video recorders.

Wavefront Technologies is located at 1421 State Street, Santa Barbara, California 93101; (805) 962-8117; Hollywood office: (213) 650-8593.



>>>> COMPUTER GRAPHICS TO GO <<<<

>>>> UPCOMING ACM/SIGGRAPH MEETINGS <<<<

March: James Blinn, JPL, and Bob Schaff, Art Center, at Art Center, Pasadena.

May: Craig Reynolds, Symbolics, at UCLA.

June: Joint Meeting with ACM featuring a showing of computer graphics pieces, including available examples of 3-D depth perception and Digital Audio.

July: N.Y. and L.A. Local SIGGRAPH chapters's Ballroom Reception at Anahiem.

>>>> APRIL SPECIAL EVENT <<<<

The Hollywood Palace will host a "B.Y.O.V. Night," Wednesday, April 22, 1987. Bring Your Own 3/4" computer graphics Video tape, screen your video and party at the same time!

Joan Collins, video show producer and Chairman of the Los Angeles ACM/SIGGRAPH, and Kathy Davis, LASER show producer, have arranged for you to have your video shown at Hollywood's premiere night spot on a Big-Screen (GE Light Valve) Video projection system with the amazing Palace sound system.

Buy admission at the Palace door or any TICKET MASTER outlet. Take your tape to the TAPE CHECK-IN/PICK-UP counter at the Palace on Wednesday night, April 22, 1987. Sign to give permission to screen your tape. You will receive a claim check for your tape. Go view everyone's video tapes from the balcony or venture downstairs to the dance floor to party while you watch. There are no-host bars. Pick up your tape with your claim check at the TAPE CHECK IN/PICK UP counter before the end of the eve.

We will be playing Party music all night long. So if the audio on your tape really rocks, that's great. If not, we'll turn down the sound on your tape and show only the visuals while we crank up more party music. You tell us which you prefer.

The Hollywood Palace is at 1735 North Vine, across from Capitol Records. Doors open at 8:30 pm, Video Screening ends at 12:00 Midnight. Admission: \$8.00 for SIGGRAPH members and \$10 for the general public - Ticket Master outlets or the Palace Box Office.

>>>> SYMBOLICS - WHITNEY/DEMOS <<<<

Symbolics, Inc., of Cambridge, Massachusetts, announced on January ninth the participation in an equity financing of Whitney/Demos Productions. Symbolics will receive an equity position and marketing rights to specific products developed for in-house use by the firm. Whitney/Demos Productions will use the Symbolics 3600 family of graphics workstations in conjunction with a powerful supercomputer for software development and production sequences.

The Whitney/Demos team is well known to SIGGRAPH members. They were instrumental in the establishment of The Motion Picture Project at Information International, Inc. (III) in 1974, established Digital Productions in 1981, and Whitney/Demos Productions was established in July of 1986.

Symbolics, Inc. is a leading producer of workstations, Artificial Intelligence (AI) research and other symbolic computing applications. Founded in 1980, the company uses a proprietary hardware architecture to implement the SYMBOLICS-LISP operating system. Over 1,000 systems have been installed worldwide.

If you are a computer graphics artist who would like to book time on a system to build a portfolio, or complete a design project, or you have artwork you need to digitize, or image files to record to film - Image Production Service would like to hear from you. The company is in the process of analysing the needs of local computer graphics users. IPS would also like to hear from any readers who have developed or had experience with high quality 2-D and 3-D graphics software for the Macintosh and Amiga. Please leave your name with the receptionist at (213) 280-1179 for information.

>>>> HARD PROBLEM <<<<

SIGGRAPH Bulletin Board Chairman, Peter Rosen, reports that our bulletin board is installed and modem ready. However, in order to operate properly and offer the large volume of material required, we really need one of our members to donate - or offer on long term loan - a hard disk and controller for an IBM PC. Perhaps with all the new high capacity drives available, your old 5-10 MByte dinosaur needs a new home. If you can help us, please call Peter at (213) 396-6194 or the newsletter office at Image Production Service (213) 280-1179.

>>>> CG INDUSTRY CAUSES LAUGHTER <<<<

A number of distinguished local computer graphics academicians have joined together to form an association called Los Angeles University Graphics Honchos, Teachers, Educators, Researchers (LAUGHTER). The group has proposed objectives of coordination of computer graphics curriculums, education funding, sharing of resources, organization of a Guest Lecturer/Artist in Residence program and the organization of an Art Show.

A quarterly schedule was originally agreed to, however it now appears that meetings will take place monthly to better address the issues at hand. It was reported at a recent LAUGHTER meeting that NCGA has started a Special Interest Group for the arts which will meet in Chicago this summer and again next year in New York. We will keep SIGGRAPH members advised of the Laugh Tracks.

>>>> PC AND MAC TO VAX CONNECTIONS <<<<

Virtual Microsystems Inc., Berkeley, CA, has announced AT/Bridge - a PC add-on board, based on an 8-MHz 80286, and the PC Bus Expansion Cabinet. Both are Q-bus versions of older Unibus products which served DEC's high-end systems. The new devices will allow Microvax II or Vaxstation users to run PC DOS applications and peripherals on any terminal on the system.

For Apple Macintosh systems, White Pine Software Inc., Amherst, NH, announced products at the Macworld Exposition this January which allow Mac users to communicate between Macs, transfer Mac text and graphics to a VAX host and run VAX software on the Mac. V-Macs, running on the VAX host, automatically backs up files as part of normal VAX system maintenance. Reggie allows Mac users to add color to Mac graphics when displayed on DEC VT241 or VT125 color graphics terminals.



CALENDER OF EVENTS

>>>> CALENDER OF LOCAL EVENTS <<<<

FEB. 4: LA/ACM MONTHLY MEETING - Amfac Hotel, 8601 Lincoln Blvd. Westchester. Social: 6 pm, dinner: 7 pm, speaker: 8 pm. Info: Mary Ellen Brennan (213) 336-7250.

FEB. 5: NCGA LOCAL CHAPTER MEETING. Social: 6 pm, meeting: 7 pm. Info: Kathy Talbert, (818) 988-2600, ext. 4117.

FEB. 5: INDEPENDENT COMPUTER CONSULTANTS MEETING - Proud Bird Restaurant, 11022 Aviation Blvd., LA. Social: 6 pm, dinner: 7 pm, speaker: 8pm. Reservations: (805) 252-3736.

FEB. 8: LA ACM/SIGGRAPH RESOURCE COMMITTEE MEETING - Rose Cafe, 220 Rose Ave., Venice, 3 pm. Info: Maroun Harb (213) 452-6604.

FEB. 10: LA ACM/SIGGRAPH MEETING: WAVEFRONT TECHNOLOGIES - UCLA, Moore Hall, Room 100, 504 Hillgard Ave., LA (Westwood). Social: 6:30 pm, Meeting: 7:30 pm. Info (213) 392-1074 or (213) 280-1179.

FEB. 13: LA SIGGRAPH NEWSLETTER DEADLINE. Send submissions to: Randy Randall, Editor, LA SIGGRAPH, 10000 Washington Blvd., Suite 400, Culver City, CA 90232; (213) 280-1179.

FEB. 17: VISUAL MUSIC ALLIANCE (VMA) - - EZTV Video Gallery, 8547 Santa Monica Blvd., West L.A., 7:30 pm. Ange Pike (818) 885-7316.

FEB. 24: AMIGA MIDI GROUP - SOS Computers, 362 S. La Brea Ave., L.A., 7:30 pm. Info: (213) 857-0371.

MAR. 4: LA/ACM MONTHLY MEETING - Amfac Hotel, 8601 Lincoln Blvd. Westchester. Social: 6 pm, dinner: 7 pm, speaker: 8 pm. Info: Mary Ellen Brennan (213) 336-7250.

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MAR. 5: SOUTHERN CALIFORNIA CUBICOMP USERS GROUP - Ampex Corp., 340 Parkside Dr., San Fernando. Social: 6:30 pm, Meeting: 7:30 pm. Ampex graphics equipment will be featured, including the AVA, ADO and Picturemaker. Info: Debbie Winsberg (818) 365-8627.

>>> NATIONAL/INT'L EVENTS AND CONFERENCES <<<

FEB. 16-22: VIDEO EXPO / SAN FRANCISCO - San Francisco Civic Auditorium, 99 Grove St., S.F. Seminars and exhibits of professional video production equipment and techniques. Sponsored by Knowledge Industry Publications, Inc., 701 Westchester Ave., White Plains, NY 10604. Registration (800) 248-KIPI.

FEB. 26-28: ICIA '87/COMMTEX - Georgia World Conference Center, Atlanta, GA. Programs hosted by the Assoc. for Multi-Image International (AMI), International Television Assoc. (ITVA), Assoc. of Audio-Visual Technicians (AAVT) and Health Sciences Communications Assoc. (HeSCA).

MAR. 9-11: NEW YORK UNIVERSITY COMPUTER MANAGEMENT DEVELOPMENT SEMINAR - L.A. hotel location. For data center managers, systems analysts. Sponsored by NYU School of Continuing Education, 575 Madison Ave., New York, NY 10022; (212) 580-5200.

MAR. 23-26: COMPUTER GRAPHICS '87 - NATIONAL COMPUTER GRAPHICS ASSOCIATION (NCGA) - Philadelphia Civic Center, Philadelphia, PA. Registration Hotline: (800) 225-NCGA.

MAR. 23-26: NATIONAL CUBICOMP USERS GROUP - In conjunction with the NCGA Computer Graphics '87, Philadelphia, PA. Info: Becky Newell, Cubicomp Corp., (415) 887-1300.

WINTER 87: FIRST INTERNATIONAL CONFERENCE ON ELECTRONIC ART, SCCA. Info: Admiraliteitskade 9a, 3063 EA Rotterdam, The Netherlands.

1ST INTERNATIONAL COMPUTER GRAPHICS ART CONTEST. Info: Dataplotting Services Inc. 225 Duncan Mill Rd., Don Mills, Ontario, Canada M3B 3K9.

APR. 15-16: EFFECTIVE TECHNICAL PRESENTATIONS - Sheraton Towne House, 2961 Wilshire Blvd., L.A. NCGA Workshop for scientific technical managers; Speaker: Alan Paller, Pres. of AUI Data Graphics and a director of ISSCO. Info: (800) 225-NCGA.

APR. 17: SIGGRAPH '87 - FILM AND VIDEO SHOW Deadline for submissions of preliminary 3/4" video tape with FINAL imagery. CG categories: Research, Corporate Communication, Science and Industry, Broadcast, Fine Art, Music Visualization & Theatrical Motion Picture. Montage pieces may not include imagery from different categories, separate entries should be made in each category.

JULY 27-31: SIGGRAPH 87 CONFERENCE - Anaheim Convention Center, Anaheim, California.

CALL FOR PROPOSALS - Art Com Electronic Network. Individuals and organizations who desire on-line access for their projects and information resources. Info: Whole Earth 'Lectronic Link.

>>>> ORGANIZATIONS OF INTEREST <<<<

ASSOCIATION FOR COMPUTING MACHINERY (ACM): 11 West 42nd Street, New York, NY 10036; (212) 869-7440.

INDEPENDENT COMPUTER CONSULTANTS ASSOCIATION: P.O. Box 9118 Marina Del Rey, CA 90291; (213) 884-6792.

INTERNATIONAL ANIMATED FILM SOCIETY - ASIFA - HOLLYWOOD: 5301 Laurel Canyon Blvd., #250, North Hollywood, CA 91607; (818) 508-5224.

LA ASSOCIATION FOR COMPUTING MACHINERY (LA/ACM): P.O. Box 90698, Airport Station, Los Angeles, CA 90009. Chairman: Dave Oppenheim (818) 785-8000; Membership: Mike Walsh (213) 297-3034.

NATIONAL COMPUTER GRAPHICS ASSOCIATION (NCGA): 2722 Merrilee Dr., Suite 200, Fairfax, Virginia 22031; (703) 698-9600.

SIGGRAPH '87: Co-Chairmen: James J. Thomas and Robert J. Young (714) 830-5680. Film and Video Show, 11920 W. Olympic Blvd., Los Angeles, CA 09964. Show Chair: Joan Collins (213) 392-1074. F&V Show Tech. Dir: Frank Foster (213) 826-3777.

VISUAL MUSIC ALLIANCE (VMA): 8435 Geysler Ave., Northridge, CA 91324. Info: (818) 885-7316.

WHOLE EARTH 'LECTRONIC LINK (WELL): Modem: (415) 332-6106, enter "g acen" at the "OK" prompt. Voice: (415) 431-7524.

WOMEN IN DESIGN: 1500 Glyndon Ave., Venice CA 90291. Info: Lorraine Fiamengo (213) 452-1341.

WOMEN IN PROFESSIONAL GRAPHICS SERVICES (WPGS):