February 1996
Volume 14, Groundhog Issue

Banks OF THE Boneyard

the journal of the association for computing machinery university of illinois student chapter.

Conference '95: *The Gathering*

By David Morgan

For those of you who have experienced the pre-EOH frenzy that engulfs ACM each year, the days before Conference '95 might have looked a bit familiar. For about a month prior to the event, it was practically impossible to visit the ACM office without catching at least one member of the conference committee in the act of reckless endangerment. The committee consisted of about 15 ACM members who joined up between May and October, of last year. By the infamous *Night Before*, the pace had built to what can only be fairly described as "frenzy." That evening, about 20 of the 25 conference volunteers got together with the committee to prepare for the events in DCL, Grainger and Beckman. The help of the volunteers was invaluable. We couldn't have succeeded without them.

My favorite part of setup was Grainger. We rented an oversized sound system for Woz's talk, and the Grainger staff was gracious enough to let us *Play Real Loud*. I was never able to play Pink Floyd's *Sorrow* loud enough... until that point. In addition to setting up A/V and chairs in Grainger for the keynote speech, we also setup the tables and networking for the Conference Employment Fair. In DCL, lecture halls were setup, walk-in registration and t-shirt sales were conducted and information packets were published. In Beckman, CAVE tours were organized. At about 9 pm, Woz arrived, laying aside the anxieties of the Conference Committee, who hadn't heard from him since August. Unlike EOH, we managed to wrap everything up before daybreak.

Steve Wozniak, Keynote Speaker

The Conference events were a resounding success. Everybody who helped

• Continued on Page 8

Sounds & Visions: A Multimedia Experience for '95

by Mike Eakes

"It was perhaps the loudest thing DCL has ever heard," complimented one concert-goer after the spectacular graphical and musical finale of the 1995 Sounds & Visions show. The show, which was a medley of music composed by ACM's very own SigMusic members, supplemented by intricate but powerful real-time, audio-responsive, graphics created by SigGraph, left standing-room-only in room 1320 DCL.

The music styles ran the gamut, including fractal music, synthpop, and even an organ fugue! Two pieces, composed by Thomas Lawrence, consisted of sounds rendered solely on his Macintosh utilizing his own software, called "Out of Phase". Graphical interpretations of the music varied from fractals to a 3-D equalizer to a colossal spinning and contorting representation of Max Levchin's head.

Using a 3-D scanner, a highly detailed model of Levchin's head was created. Dave Blumenthal was able to inflate Levchin's head on the immense projection screen, much to the amazement of the audience.

We had a difficult time keeping down the crowd-surfing, but in general, the concert ran smoothly. Dan Wellman, who conceived the idea for the show earlier this year, was pleased to see his brainchild unfold magnificently. In between the bites of his "Victory Banana", he reports that he's eager to do it all again, bigger and better, next semester on April 19, 1996.

Any interest in participating in the next concert should be directed to Dan Wellman (`wellman@uiuc.edu`), and Max Levchin (`mlevchin@uiuc.edu`).

From the Chair

by Jonathan Stark

The bathroom has traditionally been the one place where you can escape from all of your problems. For a few minutes a day, while in the bathroom, you can avoid the telephone (you have a good excuse), no family members or visitors are likely to bother you, and all the normal worries of the day stay on the other side of the door. As Al Bundy puts it, it's the one place where you can really be "king of the castle".

People used to take a newspaper or a magazine into the bathroom with them and enjoy a few minutes of uninterupted time while doing their business. One morning while I was in a hurry to get to a meeting, my laptop followed me into the bathroom. It didn't seem all that unusual at the time; I was still reading, just like most people do when in the bathroom. Technology is a wonderful thing.

But that was just the beginning.

With homework, telephone calls, and classes on the other side of the door, it seemed that with every visit to the bathroom it became harder and harder to leave. Think about it, who would want to leave their castle to brave harsh wind and subzero weather just to go sit in a lecture hall for an hour and listen to a lecture? NOT I!

Schemes for lengthening my daily stay in the bathroom started to creep into my head. It started fairly harmlessly with little things like taking longer showers, brushing my teeth a little bit longer, and getting dressed in the bathroom instead of wearing a towel to my room and dressing there. But soon I started making technological improvements to the bathroom. The addition of a case of pop and munchies more than doubled the amount of time I could stay in the bathroom. The technological level of my bathroom was growing exponentially. Soon the microwave found its way into the bathroom. (You would not believe how much longer you can hold out in the bathroom once you've got food in there!)

The magazines and occasional reference manuals that usually followed me into the bathroom were soon replaced with a soldering iron and my latest project of the day. (Note, be especially careful when soldering something over your lap without a table.) It was great! My bathroom was really starting to be my castle!

With all of this stuff in my bathroom, I needed security. Somebody might try to steal my setup, or break in! It got to the point where almost every time I went to the bathroom, somebody else would want in. I responded to this threat by bringing in the goose gun, and Thud, my 6 cell Maglight. You never can be too careful when dealing with people on the other side of that bathroom door. For some reason, people sometimes start considering breaking into the bathroom a life and death situation, so you've got to be able to fend them off. (You'd think they'd be able to wait the 4 or 5 hours each day!)

Then one day, while cooking my dinner in the microwave, I must have gotten something too close to the sink. That surge protector that's supposed to harmlessly pop when there's a short didn't pop. Technology was no longer a good thing.

The jolt that ran through my body tingled a little at first. With the bathroom door shut and no windows in my bathroom, I thought I must have passed out, or that I might be dead or something. Everything had grown very dark. (At least the tingling stopped!)

Then I saw a bright light. After focusing a little and getting a little bit of my night vision, I saw that it was coming from underneath the bathroom door. In my confusion and attempt to get to the bathroom door to see if this was some sort of trick by someone trying to invade my castle by mounting a sneak attack, my dear old friend Thud must have gotten loose. Being dark, and not having my guiding hand to help him figure out what was what, he must have mistook me for the intruder, because he Thudded me. (Thud can be a little dim-whitted sometimes.)

Thud brought on a revelation, which only could be explained as some sort of out of body experience inspired by God himself. As I stared up at the fuzzy bright light coming through the crack under the door, I came to the conclusion, as the US patent office did near the beginning of the century, that everything worth patenting has already been patented. No significant new inventions will ever be made. As my revelation started to fade and I started to return to my senses, I thought about it, and decided that it must be true; Everything worth having must already have been invented.

There's no room left in my bathroom for anything new.

One of our newsletter editors, Bridgette Deleon, is moving on to other projects this semester. We at ACM would like to thank her for the effort she's put into our newsletter, and wish her the best of luck on her future endeavors.

The Banks of the Boneyard

The Banks of the Boneyard is a student publication of the UIUC Chapter of the Association for Computing Machinery and does not necessarily represent, in whole or in part, the views of the University of Illinois, the Department of Computer Science, or the International Association for Computing Machinery.

Edited by:
Paul Bleisch
Norbert Burger
Max Levchin
Amy Ryan
Paul Swanson
Design & Layout:
Amy Ryan
Brian J. Swetland
Faculty Advisor:
Sylvian Ray

The Association for Computing Machinery at UIUC
1225 Digital Computer Lab, MC-258
1304 W. Springfield Avenue
Urbana, IL 61801
(217) 333-5828

For more information, try:
`ph acm return all`
or visit our home page at
`http://www.acm.uiuc.edu/`

Partially paid for by S.O.R.F. and the Department of Computer Science.

SigArt Builds Obscenity Database:

1001 words you can't say on the MBONE

by Mike Kreger

SigArt, the ACM interest group for Artificial Intelligence, has taken on a new and ambitious project: creating a piece of software able to beat the famous Turing Test. In short, the Turing Test challenges people to try to distinguish a computer conversationalist from a human in a computer chat scenario. Example programs include the famous psychiatrist Eliza and FredTrek, a program able to converse intelligently about Star Trek and little else.

FredTrek may remind you of some of your friends, but SigArt's Artificial Person (SAAP) will be entirely artificial, based on current AI techniques and psychological theories of word, sentence and topic recognition. The development of SAAP will be in 3 rough stages. The first stage of SAAP's development will be teaching him/her (we don't know which it will be yet!) to recognize certain words when being "spoken" to through typed text. As such, SigArt is developing SAAP for a useful purpose: being able to spot obscenities. Although SigArt may seem to be recreating Beavis, Butthead, or an extreme right-wing politician, SAAP will have a useful life monitoring SigArch's Scrolling Sign in front of 1225 DCL. Anybody can send messages for display on the sign by mailing to `acmsign@acm.uiuc.edu`, and they are broadcast without comment. Because the sign represents ACM and SigArch, anything blasphemous or naughty could mean big big trouble for our good ol' student chapter.

"Can I say ass on the MBONE?"
-- Alan Braverman,
previous ACM Chair, during the Conference MBONE broadcast

So, SAAP only wants to help us out. And isn't that what an artificial being should want? However, SigArt needs your help in making SAAP a reality. SigArt is looking for members to help in SAAP's development and coding. In addition, we need people to help teach SAAP what's naughty and what's nice! In other words, SigArt needs to build a database of obscenities that SAAP can draw upon. Watch soon for SigArt's Big Blasphemy Drive to be held at our web page `http://www.acm.uiuc.edu/sigart`.

The most creative and outrageous obscenities will be posted regularly, with a prize to the contest winner. Our meetings are every Tuesday night at 7:30 pm in room 1225 DCL. New members are encouraged to attend as we set out on the new project. For questions or comments (NO OBSCENITIES YET PLEASE!) email `sigart@uiuc.edu`.

Upcoming ACM@UIUC Events

Feb 5th, 7:00pm
Introduction to MIDI
SigMusic Workshop
1102 DCL

Feb 6th, 7:00pm:
National Instruments
Corporate Presentation
2240 DCL

Feb 6th, 7:00pm:
"Cool UNIX Tricks"
1310 DCL

Feb 9th, 5:00pm:
Résumés Due for
EOH Résumé Book

Feb 16th, 5:15pm:
ACM Rock Climbing Night
Meet at 1225 DCL

Mar. 1st-2nd:
Engineering Open House
DCL Atrium

Mar. 7th, 5:00pm:
General Meeting
Alex Bratton, BALR
1320 DCL

Apr. 19th:
Sounds & Visions II
Electronic Music &
Computer Graphic Concert

WebMonkeys Work Toward EOH Projects and World Conquest. Film at 11.

by Scott Banister

WebMonkeys is ACM's Special Interest Group for the World Wide Web. This past semester we've held workshops and discussions on topics like Java, CGI, perl, and Netscape 2.0 extensions such as frames. We plan to work with VRML and LiveScript in the future.

The WebMonkeys are currently trying to choose a project for EOH. We'd like your input! Project ideas currently on the table include:

• A web interface to Illinet Online, the online library catalog. It would sure beat the current telnet interface! This project was started by SigUNIX last year, but was never completed.

• An online ride board. This was actually suggested by one of the travel agencies here in C-U. It would provide a place where folks could post rides needed and rides offered, and after finding a match the details could be discussed via email.

• A really snazzy new UIUC People page. I'm not sure if this would make a legitimate EOH project, but there is some interest in revamping the pages with better layout and more automation, perhaps verifying signups using `ph` passwords. Work has already begun on this project.

If you have a cool idea for a WebMonkeys EOH project, speak up! WebMonkeys meets on Mondays at 6:30pm in 1102 DCL. If you'd like to stay informed about our events, mail `monkeys@uiuc.edu` and ask to be put on the mailing list. Visit us at `http://www.acm.uiuc.edu/webmonkeys/`

The ACM Up All Night Crew would like to wish former chair, Alan Braverman the best of luck with his new job in sunny California.

We would also like to remind everyone that they can purchase the Alan Braverman memorial coffee mug, embossed with the ACM@UIUC logo for $5

ACM@UIUC is also selling "Top Ten Reasons to Date a Computer Geek" T-shirts for $10

T-shirts and mugs are available in the ACM office which is located in Room 1225 of DCL, on the corner of Mathews and Springfield.

We would like to remind our members of ACM's "Open Door" Policy. All ACM members are welcome to hang out in the office. So, just walk right in and introduce yourself. We promise we don't bite.

Be thinking ahead about next year's ACM exec board. Many of our executive members will be graduating, so there will be a number of open positions on the board.

And finally, try to relax. There are only 4 months until summer break.

SigArch

by David Morgan

With Engineering Open House '96 barely a month away, SigArch has already begun its annual EOH-Frenzy. We've decided to start early this year because soldering, unlike coding, becomes quite painful when you fall asleep. Much to the surprise of the SigArch crew, we discovered that we didn't have enough projects in progress to keep members busy. As a result, the Cylindrical Display is back under the soldering iron. In memory of former ACM@UIUC Chair, Alan Braverman, the Cylindrical Display has been renamed to "The Can" for EOH '96.

Thanks to the esteemed Mr. Brian Swetland, one of our projects, the wireless PC is almost complete. We are now able to control any Infra-Red appliance over a standard serial port. Brian also wrote a way-bitchin' PC-based MC68HC11 development environment during the course of the project. We have also revived the Digital Nametag project for 1996, and we've managed to cut it down from its previous 1000 pound bulk to a handy 3.5 ounces.

Project CamBot is racing along as well. We're almost ready to have a printed-circuit board manufactured for the Network Interface Unit (a hardware-implemented TCP/IP stack). SigArch meets formally Thursdays at 6pm at the ACM office, but we can be found almost every night in L510 DCL as the frenzy continues.

SigSoft

by Michael Lee

Who the hell are we? A bunch of programmers looking for ways to have fun fooling around as much as possible? Well, when confined to limited company and locales at odd hours (the only real hours) it's hard to do all the fun and exciting things you can do with your friends. Yeah, there's `irc` (if you're really feeling deprived) and lots of other dedicated game servers or networked shoot 'em ups. We've seen all that before.

This semester SigSoft is taking at-home gaming with your friends to another level: a virtual (please excuse the use of the "buzzword") card table. Not limited to just a few hard-coded games, it's just like sitting around a table with your friends. You can do whatever you feel like with the cards, including cheating (that is, until they catch you). That's right, you can play cards with your friends, like they were actually there (not over some dumb computer game) right from the comfort of your living room (or wherever else you have an X client).

You'll find these and possibly other projects at EOH this year. Whether you are interested in helping out on a project, or if you just want to learn how X programming works, what sockets are, or want to attend a programming or software workshop, you can just drop by one of our weekly meetings. They are held on Wednesdays at 6:00 pm in 1102 DCL. And if that wasn't exciting enough, you'll even get FREE PEZ. See you there.

The Linux User's Group

by Mark Roth

The UIUC Linux Users' Group is a forum designed for Linux users at UIUC, allowing them to get together, help each other, and collaborate on projects. At each meeting we announce recent happenings in the Linux community and work on current projects. We also have an open forum where participants share their knowledge and discuss other matters of interest of the Linux community here at UIUC. Linux is a free implementation of the UNIX operating system, currently running on 386/486/Pentium or compatible PCs.

Right now, the LUG is looking for good projects for EOH. If you have any ideas feel free to bring them by!

The LUG meets at 7:00 on Tuesdays in room 1102 DCL. If you have any questions feel free to mail `lug@uiuc.edu`.

Toy Story: To Infinity and Beyond

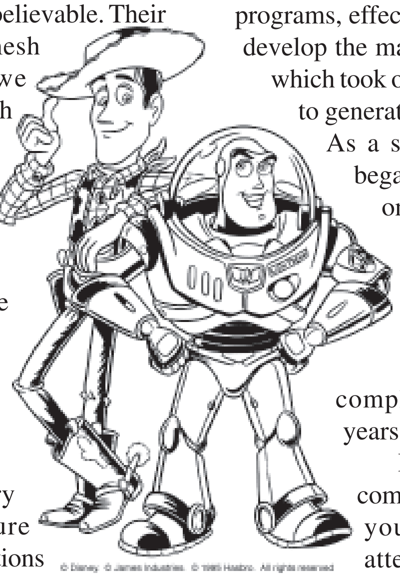
by Amy Ryan

What do you get when you combine 28 animators, 117 dual and quad-processor SPARCstation 20 systems in a Renderfarm, 1,300 Renderman Shaders, 4.5 million lines of object code, and 34 terabytes of Renderman data files?

You end up with a 79 minute computer-generated animated movie that takes you on an adventure with two toys who put aside their differences to find their way back home. Information and statistics in this article were from `http://www.toystory.com`, `http://www.sun.com`, and Computer Graphics World, August 1995.

Toy Story, which opened nationwide on November 22, tells the story of Woody, an old cowboy rag doll with a pull string voice box, and Buzz Lightyear, a space ranger action figure full of blinky lights and exciting sounds. The two toys have strong rivalry in the beginning, but slowly they learn that they need each other to survive the world outside of Andy's room. While the story follows a traditional Disney-esque plot, it has plenty of adult humor sprinkled throughout. The result is a movie that can be enjoyed by adults and children alike.

In 1991, Disney and Pixar agreed to produce *Toy Story* in two to three years. Though they finished a little later than estimated, the wait was well worth it. Viewers may want to see the movie more than once so they can appreciate the technical aspects of the film. Pixar did a nice job developing models and shaders to represent the toys of our childhood, from the lovable Slinky Dog to Mr. Potato Head. The environments include some incredible outdoor scenarios that were oftentimes difficult to distinguish from a live film. The texturing on Hannah's hair and the upholstery had a very realistic feel. The only downside is that some of the human characters were a bit unbelievable. Their actions didn't quite mesh with the actions we typically associate with humans. For instance, early in the film Andy, the boy who owns the toys, picks up his little sister. The actions Andy takes don't quite match with what a human actor would look like. This obstacle isn't insurmountable, however. The industry can use motion-capture devices to control the actions of their characters along with traditional rotoscoping techniques to give the characters a more genuine feel.



Problems with human characters aside, *Toy Story* is one of the monumental achievements of film. It will fall alongside other classic films, such as Snow White - the first animated full-feature and the Wizard of Oz which had a large impact on color films.

So the real question is - what impact will this film have on the computer industry? With the success of *Toy Story*, the entertainment industry is now exploring areas of computer entertainment. The industry needs more than artists to make movies like this possible. Application developers are needed to create 3D programs, effects and shaders; as well as to develop the massively parallel renderfarm which took only 800,000 computer hours to generate the film's 114,240 frames.

As a side note, if the producers began rendering *Toy Story* today on an average one-processor home computer, and the computer was used exclusively for the purpose of frame rendering, the animation would be complete in approximately 43 years.

If you are interested in computer animation or graphics, you may want to look into attending SIGGRAPH '96 in New Orleans. At SIGGRAPH, you get a chance to see some of the latest advances as well as a chance to make connections with others in the industry. It was at SIGGRAPH '95 that my love for *Toy Story* developed. There, I was shown a short trailer featuring the marching plastic soldiers spying on the new toy. *Toy Story* is definitely a movie worth seeing at least twice, once for the plot and once to appreciate the technical merit.

SIGMUSIC

Captain's Log, Stardate 42801.3

by Dan Wellman

We have encountered a strange group of humanoid life forms that exhibit social clan pattern characteristics, calling themselves the collective "SigMusic - the Special Interest Group for Computer Music."

They seemed fascinated with the creation and study of music on or by computers or electronic devices. This clan met on a regular basis to share their knowledge, every Wednesday at 7:00 PM in a hallowed "Room 1102" of their superstructure called "Digital Computer Lab." We were offered membership into their society, as they emphasized that new members were always welcome regardless of experience or background.

The group was bustling with activities and informational workshops. Introduction to "MIDI" through software and hardware development was taking place for humanoids new to the computer music field. Others chose to work on a remarkable project called "vocoder," a strange device, which combined human voice with a musical tone giving the effect of a talking instrument! This project was destined to be shown in an annual celebration of science and technology, worshipfully referred to as "Engineering Open House." The clan encouraged us to get involved and help out with EOH plans - there was a job for each and every one of my starship's crew.

Preparations were being made for their celebration of sight and sound, mysteriously referred to as "Sounds & Visions." Destined to take place on April 19, 1996, this concert will be the second time the group has ever performed the ceremony; and they wanted our input and participation to make things even better than the last time.

A workshop meeting was spoken of in hushed tones; an introduction to MIDI and composing music with computers was the topic. They mentioned the date to be Monday, February 5th at 7:00 PM in the mystical "Room1102." The workshop appears to be beginner-oriented, and all humanoids are encouraged to attend.

Digital Libraries and Free Reference Works

by Ben Gross

Some initial thoughts on access, equality, and copyright in free online reference works.

A number of commercial reference works with expired copyrights have recently found their way online. These works include: Roget's Thesaurus, Webster's Dictionary, Bartlett's Dictionary of Quotations, and Strunk and White's Manual of Style. The free online versions all have expired copyrights; Roget's (1911), Webster's (unknown), Strunk and White's (1918), and Bartlett's (1901). "[The] number of years used in calculating [copyright] durations has changed, from either 28 or 56 to either 50, 75 or 100, depending on the type of work." [copyright FAQ] Recently, I have begun to see these online versions heavily referenced. All of these works are still in production today in a current and updated print form. The publishers have not been slow to make the current forms available online, for a fee. Most major reference works are now available on CD-ROM and increasingly via subscription online. Some examples are: Encyclopedia Brittanica Online which also contains Merriam-Webster's Collegiate Dictionary, and the Oxford English Dictionary - a commonly exported CD-ROM. Additionally, most major commercial services such as Compuserve, America Online, and Prodigy have their own licensed reference selections.

This raises some interesting questions in terms of access and equity. Will free access to current reference works, such as in public libraries, end when libraries become digital libraries? Access to commercial quality reference works is expanded to anyone with access to the net as there are no restrictions on works with expired copyrights. However, it seems quite possible that these works will gain wide acceptance and possibly become "standard and or authoritative" beyond their years due to the fact that they are free and easily available on the net.

This said, I would be very interested in a discussion of access and equality in terms of online works especially references and other academic works. For example, what effects might this have on various academic disciplines, or even science in general. How prevalent is using a free work over a paid one, even if the free one is out of date to some degree? If you have any comments or would like to continue this discussion, send me email or stop by SigCAS or SigIR.

Bibliography:

ARTFL Project: ROGET Form `http://humanities.uchicago.edu/forms_unrest/ROGET.html`

Bartlett, John. 1901. Familiar Quotations `http://www.columbia.edu/acis/bartleby/bartlett/`

Hypertext Webster Interface `http://c.gp.cs.cmu.edu:5103/prog/webster`

Strunk, William. 1918. The Elements of Style `http://www.columbia.edu/acis/bartleby/strunk/`

Copyright Frequently Asked Questions `ftp://uiarchive.cso.uiuc.edu/pub/doc/rtfm/usenet-by-group/news.answers/law/copyright/faq/`

SigArch - Computer Architecture
Thur 6pm 1225 DCL

SigArt - Artifical Intelligence
Tue 7:30pm 1225 DCL

SigBio - Biological Computing
Thur 7pm 1102 DCL

SigBiz - Computers and Business
Mon 7pm 1225 DCL

SigCAS - Computers and Society
Wed 5pm 1225 DCL

SigGraph - Computer Graphics
Thur 9pm 1102 DCL

SigIR - Information Retrieval
Tue 5pm 1225 DCL

SigMicro - Microcomputing
Thur 8pm 1225 DCL

SigMusic - Electronic Music
Wed 7pm 1102 DCL

SigNet - Computer Networks
Wed 7pm 1102 DCL

SigOps - Operating Systems
Tues 8pm 1102 DCL

SigSoft - Software Programming
Wed 6pm 1102 DCL

SigUNIX - The UNIX OS
Wed 8pm 1102 DCL

SigVR - Virtual Reality
Thur 8:30pm 1102 DCL

Linux Users Group
Tue 7pm 1102 DCL

WebMonkeys
Wed 6pm 1225 DCL

SigVR

by Jason Hartman

SigVR is the Special Interest Group for Virtual Reality. Our group welcomes all walks of life who have an interest in exploring or experimenting with virtual reality. For those of you unfamiliar with VR, it can be defined as a wholly immersive environment, in which the user actually feels and thinks he or she is in a computer generated environment.

The main project of SigVR over the years has been, and will be, the development of PeLViS, Personal Low-Cost Virtual Reality System. Currently, PeLViS is composed of a head-mounted display (two portable Casio TV's and VGA to NTSC signal converters), two PC's (386's or higher with a serial port), and software written by SigVR. This year we hope to develop head tracking using a gyroscope, improve the head-mounted display, and add new features to the software.

PeLViS will be displayed at EOH this year, and this means we need a virtual world. Recently we decided on a virtual sandbox with you scaled down to the size of an action figure. Actual design of the world has not been laid out, but the plans currently include - yes you guessed it - a sand castle with a moat and a drawbridge, a matchbox car to drive around, and a hidden treasure you can find.

SigVR usually meets every Thursday at 7:30 pm in 1330 DCL. For more information or to confirm our next meeting date send email to `sigvr@acm.uiuc.edu`. Also check out our web page: `http://www.acm.uiuc.edu/sigvr`.

SigGraph: EOH Central Exhibit in '96

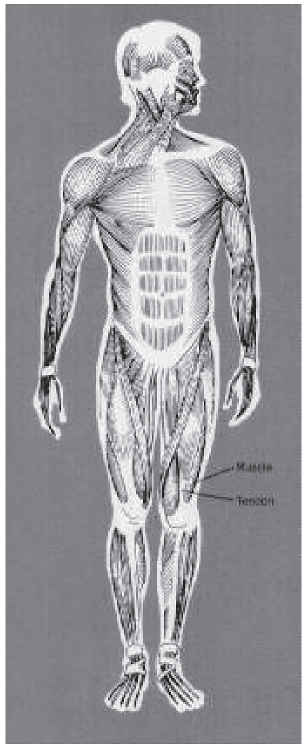
by Max Levchin

After the huge success that our collaborative project with SigMusic, the Sounds And Visions Concert turned out to be, SigGraph is busy preparing for EOH. With only 3.5 weeks left, everyone is at work, and new forces are always welcome, as usually.

This year SigGraph is doing the Central Exhibit on ACM's behalf! This means that we get to be in Engineering Hall, along with the Central Exhibits of other Registered Student Organizations, fighting to get more EOH awards for ACM. The Central Exhibit will be based on the Sounds And Visions Concert. We will have quite a few new routines and tunes for visitors to see and hear, however. A videotape of the concert and some of the concert's software will be shown as well. The center of the exposition will be an interactive demo, where visitors will be able to see computer graphics generated real-time while speaking into a microphone. SigMusic is once again helping us out with this ambitious project, as well as already supplying us with submissions for this semester's version of Sounds and Visions.

After three years of development, SigGraph is faced with the "do or die" dilemma for our DataRace project. As you might remember, Datarace is a three-dimensional, networked game for IBM PC compatibles inspired by William Gibson's immortal classic "Neuromancer". Two years ago, DataRace Development Team was founded within SigGraph, intended to allow for even more discussion and development time for the game. DDT meets on Thursdays in 229 Grainger at 8pm. Anyone is welcome to sit in of course, as well as to join the project. However, it may soon be too late! This EOH will be decisive to the fate of DataRace. Unless more new and interested members decide to take up the project and bring it to the new horizons, this will be the last year of DataRace.

SigGraph always welcomes new members, just drop a line to `siggraph@uiuc.edu` or show up in 1102 DCL on Thursdays at 9pm !



SigBio Creating Online Anatomy Book

by Joey Lasky

The semester has been going very well for SigBio. Our current project involves compiling many pictures, links, and other Web stuff which we are then putting into the SigBio homepage. Among other things included there, we hope to make a sort of Web Anatomy Book with interactive body parts and the like. Thus far, we have compiled dozens of pictures and have made a rough skeleton of the Book. Anyone with HTML or CGI programming experience would be a welcome addition to our meetings as well as anyone else interested in biology and computers. Future projects might include making an arcade game that takes place within a body, and modeling biological systems using C. One of the exciting things we have done was to see a demonstration of 3D macromolecular modeling over at the Beckman Institute where virtual wands could be used to control the rotation. We hold meetings every Tuesday at 7 pm in 1225 DCL (ACM office). Hope to see you there!!! If there are any questions or comments, direct them to the two chairs, Arwin Levinson or Joey Lasky, at the following addresses: `alevinso@uiuc.edu` or `jlasky@uiuc.edu`

SigCAS / SigIR

by Ben Gross

Both SigCAS (the Special Interest Group for Computers and Society) and SigIR (the Special Interest Group on Information Retrieval) are in a little different vein than the other fourteen. So what's the difference, you ask? Well, both SigCAS and SigIR are essentially discussion groups. This means that we meet each week and talk about issues relating to the group that gathered during this week or that were left over from previous weeks. Sometimes we meet in the Digital Computer Lab (DCL), but more often than not we just head toward Murphy's. So what does this mean to me, you now ask? It means that if you heard about a cool topic that relates to the Sig you can bring it to the meeting and we can discuss it. It means that if you miss a week or two, that you are not behind in any way. It means that if you can't program in eight languages on five platforms, no one cares. It means that if you want to get away from volunteering for any more projects, no one will ask you, because there are no projects, just discussion. So if you like to discuss, argue, rant, throw around all those nifty keen ideas you have been having, or just sit back and listen, then stop by and check out SigCAS and SigIR.

If you want to know more, see:
`http://www.acm.uiuc.edu/sigcas/`
`http://www.acm.uiuc.edu/sigir/`

SigUNIX

by Jesse Olson

SigUNIX is actively pursuing UNIX development throughout the computing world on campus. SigUNIX's plans for EOH are not yet formed, but they will be discussed at an upcoming meeting, which may have happened by the time this is printed.

The ACM's Cool UNIX tricks workshop, being held on February 6th at 7pm in 1310 DCL, has been received well by SigUNIX devotees. This workshop should provide a good insight into UNIX, and perhaps get SigUNIX some more members.

The Engineering Open House is coming up in about 5 weeks and SigUNIX will provide some contribution to this event. There are suggestions being made into definite plans. There is still time to add suggestions or influences to SigUNIX's projects should anybody have ideas/goals/random hallucinations that would make cool UNIX projects.

In one of our latest meetings, the idea of an X window interface for the chmod command has been proposed. Some people in SigUNIX are quite impressed with this idea and will work on it at the upcoming meeting.

For those interested in SigUNIX, our meetings are in DCL at 8 pm on Wednesday, and meet at the ACM office.

Conference '95

• Continued from Page 1

out deserves recognition: Professor Francis and his CAVE crew pulled through in a pinch and demonstrated just how cool NCSA can be to participants from across the midwest; Charley Kline not only gave a talk with Jon Roma on the history of CSO/UIUCNet but also led tours through the underground bunker that houses Node1. Professors Andrew Chien, Rajesh Gupta, Ralph Johnson, and Dan Reed gave talks on a variety of relevant subjects in addition to talks by David Jeske, Ron Rice and Chuck Thompson. MechMania was perhaps the most successful event of the conference. Eight teams from across the Midwest competed, and all were profoundly impressed by the concept and API that Jay Kreibich and Brian Swetland built. Don Ray and the Computer Science Department as a whole deserve our profound thanks for their help with the programming contest and the conference as a whole. We must also, of course, thank all our corporate sponsors, including AIS, Andersen Consulting, BALR Consulting, Citrix, Compuserve/Spry, Enterprise Integration Technology, FactSet, Hughes Information Technology, IBM, SEI Information Technology, Silicon Graphics and Symantec.

Conference Chair, David Morgan, supervises audio hardware during Steve Wozniak's Speech.

Woz's talk was, in a word, great. He spoke about the process that he went through during his whole life (from 5th grade on) to build the Apple computer. Mr. Wozniak was a more dynamic speaker than anyone expected. We thanked Steve in the most profound way we could, with the gift of an official ACM@UIUC coffee mug. This article wouldn't be complete if we didn't acknowledge Alan Braverman's stunning performance that evolved from a simple sound check before Woz's talk to a whole pregame show. The latter bit of Alan's

Corporate Liaison Update

An ACM update from your Corporate Liaisons

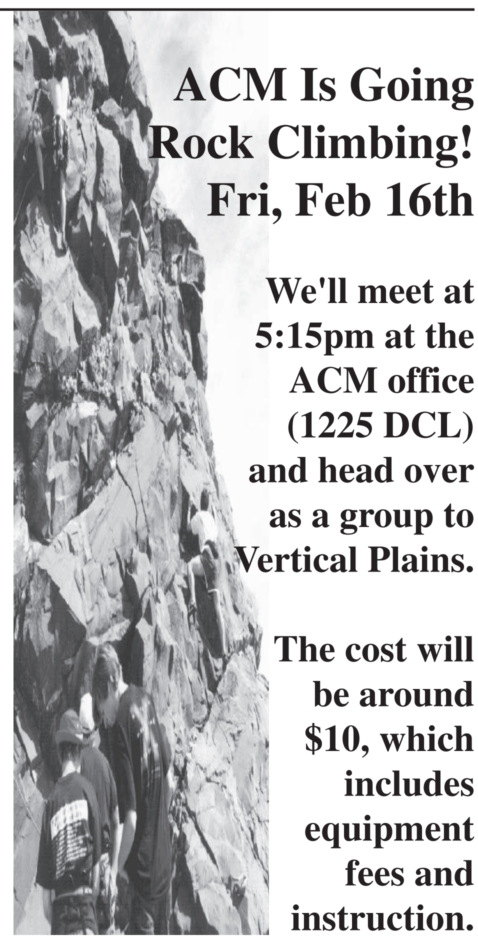
You may not have heard of us, but we're quite busy doing things for ACM and its members. Some examples:

The ACM@UIUC resume book. ACM distributes this booklet ("chock full of your mom's favorite resumes") twice a year to a large number of companies. Many corporations ask for this book by name as it is helpful resource when they are hiring. Corporate representatives appreciate being handed a resume book with many resumes, as opposed to talking to the each student separately. ACM saves its members and our corporate contacts time by sending out resumes en masse. If you submit your resume for inclusion in the book, you can be assured that most major companies that hire engineering students will get a copy of your resume.

The next resume book will be printed about one week before the annual Engineering Open House (March 1 this year); the due date for resumes is February 9th. For best results, submit a laser printed version of your resume.

Also in your job search, you may want to contact some ACM alumni. ACM invites seniors that join the corporate world to send in their business cards and addresses in order to remain in touch with ACM@UIUC. These successful individuals could be valuable contacts for you during your job search, and you can find their business cards posted behind the main desk.

The Corporate Liaison is also responsible for representing ACM to the corporate community. Recently we've received generous donations as a result of these contacts, such as a Laserjet printer from Hewlett-Packard, monitors from Lante, and an extremely generous donation of a hefty SparcStation 20 from Sun Microsystems to replace our ailing web server (sleepless.acm). We at ACM owe all of these companies our gratitude for their support. For more information on these corporations or their donations to ACM, see `http://www.acm.uiuc.edu/thanks.html`.



ACM Is Going Rock Climbing! Fri, Feb 16th

We'll meet at 5:15pm at the ACM office (1225 DCL) and head over as a group to Vertical Plains.

The cost will be around $10, which includes equipment fees and instruction.

The winners of the MechMania programming contest receive their plaque and stack of O'Reilly X Programming Reference manuals at the end of the MechMania double elimination tournament.

tomfoolery, in addition to the keynote speech was captured on DAT, SVHS BetaCam, as well as being blasted out over CCTV and the MBONE. Mr. Wozniak has agreed to allow free distribution of his talk, and we will be making copies available next semester, once we assemble the footage into a consumer-friendly format (VHS).

With the "First-Annual Midwest Regional ACM Chapter Conference" complete, planning is already in motion for next year's event.

If you are interested in joining the committee or just seeing what it's all about, mail `conference@acm.uiuc.edu` and you'll be added to the list.

Conference '95 Committee:
Norbert Burger, John Criswell, Ryan Daulton, Ben Gross, Joel Jones, Max R. Levchin, David Morgan, Amy Ryan, Jill Smith, Jonathan Stark, Brian J. Swetland, and Jeff Thompson.

Conference '95 Volunteer Staff:
Jeffrey Absher, Scott Banister, Alan Braverman, Andrew Todd Brown, Charles Clark, Michael James Eakes, Greg Fast, Joe Gross, Dave Jeske, Greg Kaiser, Edward Kang, Jay Kreibich, Kenyon Lee, Dan Norris, Daniel Sachs, Chris Seguin, Stephen Sprunk, David Thanairongroj, Brett Trimble, Paul Watts, and Dan Wellman.

UIUC Network Architect Charley Kline gives a tour of Node1 during the Conference

SigOps–A Mile of Operating Systems at EOH

by Paul Swanson

Imagine, if you will: a mile-long mural of the "Windows" logo, displayed at this year's ComDex, painted on one of the walls inside their building. Imagine this, and you will have a vision resembling what the SigOps project is.

Except, the mural is not a mile long, and it's not a mural really, more of a collection of posterboard; "Windows" will be replaced by SigOps' comparison of both contemporary and classic operating systems; and it will be displayed at this year's Engineering Open House, instead of ComDex.

Nevertheless, it's still a great way to learn about different Operating Systems, and to help other people do the same. SigOps is well on its way to making the project a success, but we still have many systems left to research, and we can use some help. So if you are up to learning what your favorite operating is about - be it Windows, Unix, or TUNES - come join us! We meet every Tuesday at 8 pm, in 1102 DCL. Otherwise, we'll see you in front of our mural at Comdex—err, posterboard at EOH.

Banks Logic Puzzle: "Hello, my name is..."

by Paul Watts

Larry, an enthusiastic yet mentally deficient CS student, has been given a job making nametags for the four special guests at a CS department meeting.

The four guests each use a different editor, Unix variant, and programming language.

Unfortunately for Larry, he wasn't paying much attention when his boss told him what to put on the nametags, so he doesn't know who likes what and who programs in what.

He goes to his friends and asks them if they know any of the people who are coming to the meeting. Larry's friends, being as mentally deficient as Larry, can only give him small details about various people. But Larry can't seem to put everything together to figure out who is who. Can you help him?

Names: Daisy, Steve, Llewellyn, Gertrude
Editors: emacs, vi, pico, joe
Unix variants: Solaris, AIX, Linux, BSD
Languages: C++, Java, Perl, Lisp

Hints:
- The emacs user is a man who likes Lisp.
- The woman who uses pico likes BSD, but does not use object-oriented languages.
- The C++ programmer uses AIX and joe.
- Daisy loves Java, but thinks Solaris is a joke of an operating system.
- Llewellyn can't stand AIX.

You have enough information to solve the puzzle. Good Luck!