THE BANKS OF THE BONEYARD

EOH Projects

By KC Smith

SigArch: Educational 4-bit adder	Shows how a 4-bit adder works and teaches how to convert numbers to and from binary.
SigArt: AI	An artificial game player that attempts to improve its methods and strategies every time it plays.
SigBio: Virtual Anatomy Textbook	An online multimedia equipted tutorial for undergraduates interesting in learning about human anatomy and physiology.
BUG: Be Showcase	Showcase the innovations of the BeOS and the BeBox with applications written by UIUC students.
SigGraph: Traveling Digital Art Gallery	Some of the best works that make up SigGraph's Traveling Digital Art Gallery will be presented by their authors. The techniques used in the creation process will be explained on the spot!
SigGraph: Ripples	A simple optical concept turned high-tech! Touch the monitor and watch water ripples.
LUG: Linux-Broadcast and other cross-platform applications	A port of the Broadcast program from the Macintosh and ways to show how Linux can internetwork with many platforms.
SigMicro's WinDevils: Project Titan	A multi-player 3D strategy/action game where the player is pitted against other humans or NPCs (Non-Player Characters).

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By Christy Schumacher

Don't be surprised if DCL doesn't look quite right on March 14 and 15 — for those two days, DCL will be transformed into ACM World. The DCL Transformation Committee is hard at work trying to make ACM World the most happenin' place on campus for Engineering Open House. With hip-hoppin' music and more, no one will want to leave!

With a funky beat playing in the atrium, people are going to be movin' and groovin' to all the projects. And why wouldn't they? If EOH participants visit enough ACM World exhibits, they will be able to register for a prize. You'll have to wait until March to find out exactly what the prize is.

You'll also want to check out the ACM video that is currently being produced by the Video team. Do you want to visit the virtual reality CAVE? Or are you curious as to how you can get involved in this supercool organization.

Stop by the general information booth, where you'll find brochures telling you all about ACM World's exhibits and where they can be found. Now all we need to top it off is permanent greeters at the door, right? We're way ahead of you.

We'll be swinging through the rafters and hanging signs all over, so come to Engineering Open House and see what interesting things are going on in ACM!

...Imagine ACM

SigSoft: Loss of Ground

By Miguel Custer

The thunderclouds that perpetually hovered over the Great Lord of Sigsoft rumbled ominously as he stared at the current positions of our troops on the map. I shifted my feet nervously. There was a large hole filled with the blue flags of the CS Department where the outpost for Campus Chaos once stood. Templar Hack was still unaccounted for after his last battle report with the multiple CS class legions he was fighting when we lost contact.

IV.1 How has this been allowed to occur?

I gulped and quickly formulated a reply in my mind. "It appears we have made a mistake in our planning, Great Lord. We have overextended ourselves and left a possible opening for an attack. With the Great Battle (EOH) soon to be fought, we had hoped to bring three new weapons to bear for the greater glory of SigSoft, but we did not allow for certain projections! The legions of CS232 and CS225 brought massive MPs to bear on a good number of our initiates and templars and we were swept away. I apologize for this oversight, Great Lord, it will not happen again," and I abased myself before him.

IV.2 It had better not, for your sake, Deacon, but now I wish to hear what our current situation is on other fronts.

Standing quickly and pointing to the battle map I said, "Our other two projects fare far better than Campus Chaos, Great One. Templar Rishi and I completed the overloaded operators for certain classes a few days ago and Templars Kolb and Sreenkantham have pretty much written the library files for all of the classes. Templar Luther has offered to begin work on the network code immediately and actual coding is underway. We are a little behind but I have faith that our diligence will pay off with NetPong being ready by The Great Battle! We will begin recruiting others now for more coding as well. As for VIDEX, the project you yourself are involved in, it is farther along as well. You have the basic layout done and with the aide of Templars Kammeyer and Taylor, VIDEX is on its way."

The Great Lord mulled over the battle map, pausing to chuckle darkly at the thick presence of ACM at DCL and scowling at the loss in numbers as our higher templars have begun to move to the corporate churches nationwide with greater frequency.

V.1 All is not lost, SigSoft and ACM shall prevail against the raging tides set against us. When the Great Battle is upon us we shall bring our weapons to bear in showing the world what kind of power we truly are.

With that, the shadows slowly enveloped the Great Lord as he returned to the heavens to rejoin the other Masters of ACM, looking at me one more time.

V.2 Take whatever forces that are still usable from the Campus Chaos project and funnel them to the other two. Give CS that ground and hold at the inner line, but if we lose another project like this again, you'll be coding against the CS225 and CS232 legions' MPs with a TRS-80!

Shaken, I staggered out of the war room and into the general meeting hall where the rest of SigSoft waited expectantly. I quickly regained my composure and put a scowl on my face as I swirled the matters around in my head and chose the words I would say to inspire new resolve in our battered defenders. I swore to myself that I would not let our numerous enemies overwhelm us. I wasn't sure which fate was worse, being eaten by the legions of CS, or facing our angered Great Lord.

NetPong

By Anatoly Delm

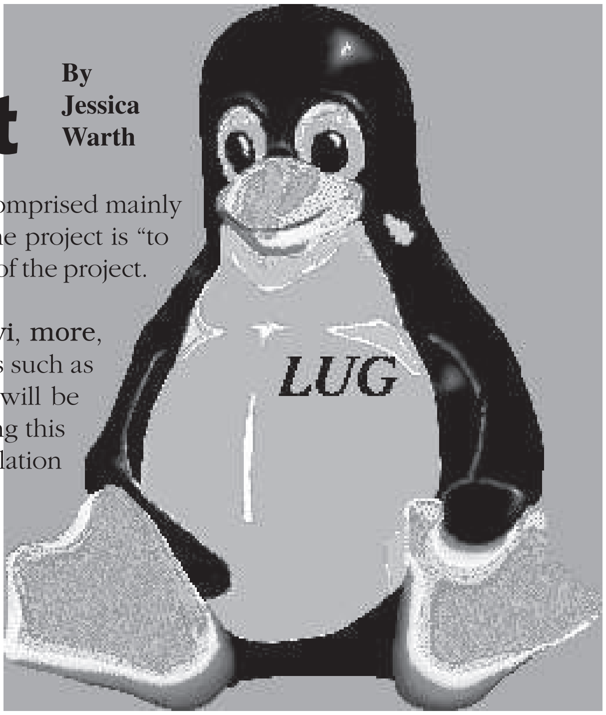
Well, it's been two decades since the seventies — the years when bell-bottoms were in, John Travolta dominated the Silver Screen, and everyone was raving about Star Wars. And yet, today, in 1997, bell-bottoms are back, John Travolta is all over our movie screens, and the Star Wars hype is even greater than before. Although not everyone at ACM is rushing out to buy leisure suits and dig out our parents' fondue pots, SigSoft is making its own tribute to the Carter era by bringing back an old favorite — that grandfather of all video games, Pong.

Our version of Pong — NetPong (for it is, after all, the nineties) — is a relatively simple networked game, capable of supporting up to four players, playing either in teams or every-man-for-himself. It was initially written for the Unix/X-Windows system, although a Windows 95 version is being considered.

The game was written entirely in C++ and was used as a training project for the SigSoft newbies to get their feet wet. (Now we had better go dry them off — it's really difficult to code with pneumonia....)

The UIUC Linux Distribution Project

By Jessica Warth



The UIUC Linux Distribution Project is finally under way! It is comprised mainly from members of the Linux Users' Group (LUG). The goal of the project is "to make a good UNIX system," as stated by Mark Roth, coordinator of the project.

The basic distribution package will include such programs as vi, more, and the other skeletal parts of the typical Unix system. Programs such as emacs and less will be available in add-on packages which will be managed by the encap system. Jason Wessel will be coordinating this portion of the project. Geoff "G0ff" Raye is working to make installation and administrative tools available.

Anyone interested in working on this project is encouraged to attend the distribution meetings which are held every other week immediately following the LUG meeting at 8:30 PM. Come to a LUG meeting or mail `linux-dist-l-request@acm.uiuc.edu` with the subject "help" for more information.

SIG-BIO

By Romesh Kumbhani

Let's get the facts straight. Spring break is just around the bend, and you're dying for something to do in the meantime. Sure, you could always do some homework or study for that exam... but let's get real. Why not just stop by the ACM office and join SigBio for an evening of witty repartée about recent advances in biology and technology.

SigBio, ACM's Special Interest Group for BioComputing, is unique among the life sciences organizations on campus; it is the only one that actively integrates science with computers.

Currently, SigBio is working on our Engineering Open House project - the Virtual Anatomy Textbook (VAT). This world-wide-web based tutorial is geared to helping undergraduates with little or no experience in the life sciences understand human anatomy & physiology. The tutorial will utilize a wide variety of multimedia, from pre-rendered three-dimensional images to ear-popping acoustics. We hope to make this one of the most dynamic methods of biological instruction available online today. Currently we have completed work on the lymphatic system and we should have the nervous system finished by the time this article is printed.

SigBio meets regularly at 6:00 PM in 1225 DCL (the ACM Office) every Tuesday. More information about SigBio can be found at our web page at `www.acm.uiuc.edu/sibio/`. If you have questions or new ideas for projects, don't hesitate to contact the SigBio Co-Chairs, Robert Hyslop (`hyslop@uiuc.edu`) and Romesh Kumbhani (`kumbhani@uiuc.edu`). See you Tuesday!

Introducing BUG@UIUC

By Jason Luther

The Be Users Group is a new users group focused on application development for BeOS.

In case you're not familiar with it, BeOS is a buzzword-compliant operating system designed for multiprocessor PowerPC (Macintosh and CHRP) systems. The object-oriented OS has an excellent developer support program and a simple API that uses C++. The final release of BeOS, due out this year, will be bundled with Macintosh clones from PowerComputing and Motorola.

Our biggest event to date is the Be Demo Tour, which will be held on March 7 from 4:30 to 6:30 in 1320 DCL. Michael Hopwood, Be's product manager, and Scott Paterson, a Be evangelist, will be demonstrating BeOS to students and faculty.

If you're interested in BeOS, please come to our meetings on Saturdays at 2 in 1102 DCL. For more info, mail `bug@uiuc.edu`.

BeOS

SigVR would like to thank SGI for its generous donation of an O2 and a 200MHZ Pentium, both with 21" monitors.

Thanks SGI!

They also gave SigVR substantial technical support for VRML 2.0 development.

SigVR

By Wyatt Haase

Prepare to be impressed. SigVR's Engineering Open House exhibit is entitled "Virtual Reality on the Web." We took VRML (Virtual Reality Modeling Language) and created as many applications as we could in the time available. VRML is like HTML in that it can be viewed on the Web, and it is text based. A VRML world has 3D objects, can respond to user input, and can exhibit behaviors based on logical scripts.

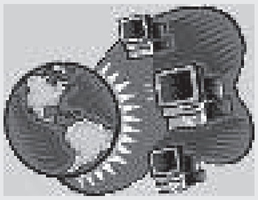
Silicon Graphics graciously loaned SigVR a Pentium 200 and an O 2. Both extremely powerful machines will be set up at the "Virtual Reality on the Web" exhibit. We will have a SVGA projector to magnify the picture from the Onyx 2. Virtual IO glasses will complement the Pentium along with a Web TV remote as the controller. There will be an additional Pentium so that visitors can play multi-user games in the VRML worlds.

Visitors will be able to navigate the worlds on all three computers. The worlds will consist of (but not be limited to): an interactive maze, M.C. Escher-like worlds, a spaceship training course, and possibly a roller coaster. Come see the Onyx 2 in action. It is an extremely fast graphics workstation capable of breathtaking real-time rendering.

VRML2.0 is **the** standard for 3D on the Web. SigVR has implemented Java-based extensions and lots of other cool stuff. If you have any questions about VRML2.0, come see us. We will be happy to accommodate your interests. Email SigVR at `sigvr@acm.uiuc.edu` or check out our web page at `www.acm.uiuc.edu/sigvr/`.

SigNet

By Chris Sims



SigNet, ACM's Special Interest Group for Networking, welcomes people of all experience levels who have an interest in computer networking.

We have several committees that focus on specific areas of interest. Featured this month is the Network Programming Basics Committee, chaired by Chris Sims. This bunch is putting together a workshop series that will teach people how to write network programs. The committee members are currently researching topics ranging from basic networking models to the nitty gritty of socket programming. Putting the workshop together is truly a fun learning experience for all involved. The committee meets Monday nights immediately following the main SigNet meeting.

SigNet has 4 other committees. Patrick Dorn heads up the Tour Committee which is arranging tours of interesting network installations for SigNet members. Jesse Olson is the chair of the Security committee, a group of people who have a special interest in network security issues. Jason Kenny is Chair of the Java committee. The Java committee is putting together a workshop on Java programming with a focus on its networking capabilities. Chi Zhang chairs the Game Committee, which is looking into creating a network game. All of the committees are looking for new faces, and it's enthusiasm, not experience, that counts!

Want to know more? Come to a meeting. We meet Mondays at 7:30 PM in 1102 DCL. Visit our homepage at www.acm.uiuc.edu/~signet or email signet@uiuc.edu.

See And Do Cool Stuff At

EOH

`www.acm.uiuc.edu/events/eoh/`

The Mac Daddies

By Vik Adukia

Okay, I know we've been kind of hiding in the background, but now the MacWarriors are picking up speed. We kicked off the semester with a Marathon 2 tournament. For those who don't know, Marathon 2 is a game like Doom, only much, much harder. We expected a turnout of around 15 people but were quite surprised when 25 people showed up. The carnage was everywhere. We also had a few people that opted to play networked Warcraft II and Command and Conquer instead.

Thanks to Ambrosia software, we will begin to start working with Escape Velocity. Escape Velocity is a highly customizable game that combines trading, fighting, and various Missions From God. We will be designing our own plugins to help us better learn how to use ResEdit and various graphical tools.

Just to show that we're not all about games, however, you should know about the other projects we also have planned. One of these is to create our own Mpeg3 player. Because the current Mpeg3 players out there suck, we want to do our own. Also, because of the new operating systems available for Macintosh Hardware (MkLinux, BeOS), we're branching out all over the place.

If you would like more information, come to one of our meetings on Sundays at 2:00 PM in 310 Lincoln Hall, or check out our homepage at `www.acm.uiuc.edu/sigmicro/macwarriors/`.

The MacWarriors would like to thank Ambrosia Software for their donation of registration numbers for escape velocity.

`www.ambrosiasw.com`

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`www.escape-velocity.com`

...continued from page 1

SigMusic & SigGraph: Sounds & Visions	A multimedia concert experience featuring exciting electronic music accompanied by imaginative computer graphics.
SigNet: Cool Net Stuff	A demonstration of cool things that can be done using networked computers.
SigSoft: NetPong	A networked version of the well-known game Pong.
SigSoft: VIDEX	Visually-oriented Integrated Development Environment for X/UNIX. An attempt to integrate development technologies found prominently in development environments for conventional OSes with the flexibility offered in the Unix and X environments.
SigVR: Virtual Reality on the Web	VRML2.0 worlds—a spaceship training course, character animation, and themes on topics such as M.C. Escher.

`www.acm.uiuc.edu/events/eoh/`

Be IRC

By Jeremy Shaw

The Internet is full of happy computers busily transferring megabytes and megabytes of worthless information over Internet Relay Chat (IRC). But alas! ACM's BeBox is alone and isolated from the hordes of people spending many productive hours on IRC.

In order to save the BeBox from a life of solitude and misery I have written an IRC client for the BeBox. In addition to providing an interface to that timesink known as IRC, the client will also be used as an instructional aid and example of programming under BeOS. Workshops will be given on how to program under the BeOS interface API and how to implement threads and networking code.