ORANGE COMPUTING

Newsletter of the Department of Computer Science, Oklahoma State University

Issue 2, Fall 2008

COMPUTER SCIENCE AT OSU TURNS 40!

The Computer Science Department at Oklahoma State University turns 40 in 2009. As they say, life begins at 40! Celebrations are planned in 2009 to commemorate the 40th anniversary of the founding of the department. More details will be made available at a later date. If you have any suggestions on how we should celebrate this milestone, please send an email to Dr Xiaolin (Andy) Li at xiaolin@cs.okstate.edu

The 20th anniversary of our department was celebrated in 1989. Also, in 1989, the department of Computing and Information Sciences (CIS) changed its name to the Computer Science (CS) Department. Our MS program was approved in 1968, our BS program was approved in 1977, and our PhD program was approved in 1981.

The list of CIS/CS department heads since the department was founded in 1969:

- Donald D. Fisher 1969-1974 (1974-1978 Director of School of Mathematical Sciences consisting of Mathematics, Statistics, and Computing and Information Sciences Departments)
- Donald W. Grace 1974-1976 (acting chair)
- J Richard Phillips 1976-1981
- Donald D. Fisher 1981-until his retirements in 1984
- G E. Hedrick 1984-1994
- G E. Hedrick on leave 1993-94 with Blayne E. Mayfield as acting head
- Blayne E. Mayfield 1994-August 2000
- G E. Hedrick August 2000 to June 2007
- Subhash C. Kak July 2007- to date

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A computer salesman, a hardware engineer, and a software engineer are driving in a car together. Suddenly the right rear tire blows out, and the car rolls to a stop. Our three heroes pile out to investigate. The salesman announces sadly, "Time to buy a new car!" Says the hardware engineer, "Well, first let's try swapping the front and rear tires, and see if that fixes it." Replies the software engineer, "Now, let's just try driving the car again, and maybe the problem will go away by itself."

Source: http://www.juliantrubin.com/computerjokes.html

Faculty News

INTERNET COMMUNITY FOR ELECTRICITY CUSTOMERS

News Release

The department of Computer Science at Oklahoma State University has an exciting collaborating with Central Rural Electric Cooperative to develop an Internet community for cooperative customers. This abridged news release outlines the strategic alliance between OSU and Central Rural Electric Cooperative.

OSU Department of Computer Sciences Partners with CREC

By Lorene A. Roberson

STILLWATER, Okla., April 9, 2008 – The Department of Computer Sciences at Oklahoma State University and Central Rural Electric Cooperative recently signed a strategic alliance to develop an Internet community for cooperative customers.

Internet communities, also known as social networks, are growing rapidly throughout the U.S. The cooperative's new network will help connect its customers in seven counties.

Two OSU representatives and two cooperative representatives signed the alliance on April 10 on the Stillwater campus. David Swank, chief executive officer of the cooperative, C.D. Mihura, president of the cooperative board of trustees, Peter M.A. Sherwood, dean of the College of Arts and Sciences at OSU, and Kak all were on hand for the signing.

Dr Kak (right), Dean Sherwood (second from right) with David Swank and C.D. Mihura of CREC

"This alliance gives formal shape to collaboration between CREC and the CS Department of OSU that has gone on for several months," said Kak, who is a professor and head of computer sciences at OSU.

Kak and his team will use CREC's MySource as a framework in the design of a new kind of a social computing network that not only brings people but it provides an outlet for businesses and schools to create communities that parallel the real ones and, most importantly, it provides information and choices to customers to optimize their energy use in the home or in the business. Originally named Pulling Islands of Data into Working Harmony, this concept was awarded the national Cooperative Innovators Award for the year 2007.

The cooperative serves Garfield, Lincoln, Logan, Oklahoma, Noble, Payne and Pawnee counties. The new social network will allow customers to partner with MySource and establish a local portal allowing improved Internet access to local information, which includes chamber of commerce, city governments and school districts.

Kak estimates that it will take about a year and a half to develop the program. To learn more about the OSU Computer Sciences Department, visit http://a.cs.okstate.edu/. For more information on the cooperative, visit www.crec.coop.

Student News

PH.D STUDENT ATTENDS SUMMER SCHOOL IN NORTHERN IRELAND

Sunny Choi, a Ph.D. student in the Computer Science Department, attended a "Workshop and Summer School on Evolutionary Computing – Lecture Series by Pioneers" at the University of Ulster in Derry, Northern Ireland in August. Her report follows:

"There were three invited speakers, all with top international reputations: David Fogel, Kenneth de Jong, and Hans-Paul Schwefel. In addition to giving two one-hour lectures each, each of these pioneers was available for discussions with students who were present.

The opportunity to hear these lectures and especially to interact with the speakers was inspirational and priceless. Each one had valuable advice to give. For example, Dr. Fogel emphasized learning about the landscape of the problem, where good or optimal solutions may lie in the solution space, before thinking about algorithms to solve the problem. Professor Schwefel emphasized solving the problem with the right tools or combinations of tools, as opposed to being rigid about using a particular method that might have been developed for another environment. Dr. de Jong introduced several meta-methods. All were working on unifying the area of evolutionary computation.

Another aspect of the summer school was meeting other graduate students who are going through the same process. Doing research can be an isolating experience, especially if you are not working with others as a team. It was good to talk to others and share common concerns. This summer school was inspirational to me and was an experience that I will not forget."

Sunny also took the opportunity to explore the area. She reports, "I joined a local hiking club to walk the Antrim coast a day before the conference. It was the nicest group of people one could imagine, and I was lucky enough to be part of it.

After the conference, I took a week to travel through Galway, Aran Island, the Ring of Kerry and Dublin before coming home. The scenery was beautiful, but what was more touching was that the Irish were really friendly people. The farther away you are from Dublin, the more personable people are. It is so true that Irish people love to talk, and most are talented in storytelling. Once I met a man on the bus from Derry to Galway whose entire life history I heard before he spoke his fifth sentence. If you open up a map on a street, there would be two or three people stop to offer help. If you go out to eat in a pub, there would be someone who would want to sit with you even though there are other empty tables. Even when they say a casual "good-by", they make it sound as though they really mean it, wishing me well on my journey back home and beyond. They just were not going to understand American aloofness if I behaved like I was home in the US.

I was told that it was the first clear day that they had seen after 27 days of the rain. I gladly took credit for bringing the sunshine to Northern Ireland. (You may contact Sunny if you need some sunny weather in your part of the country – editor)

Our group stopped to talk to a man who was enjoying the sunshine in his backyard, with the Atlantic Ocean as the backdrop.

I heard that the reason Irish people are good storytellers might be because they (the Catholic majority) were not allowed to be educated under British (Protestant) occupation, and all of their history was oral since they could not read or write. Another person I met on a bus told me that the Irish are so happy finally to have something like tourism and businesses to talk about, rather than famine and wars.

A lot of the people, especially near the college campuses, were interested in the American election. They seemed to be more informed about our candidates and the issues than some of the American voters I have encountered.

There is something called a "Pub Crawl" in Dublin, which is a program led by a couple of traditional Irish musicians (this is not how I remember pub crawls from my younger days – editor). They take you to three different pubs for the night. They demonstrate the musical instruments and explain the background of some of the songs. Their music is interesting and the spoken language and the lyrics are beautiful. More than that, you get to hear a little bit about Irish history and its people.

Now you must be wondering if I really went to Ireland for the summer school or for vacation. It was great to feel like I actually have a life outside my cell in the Math Science building for twelve days. Oh, by the way, I really did go to the summer school!"

This is the pub near Trinity College in Dublin where the Pub Crawl starts.

Kilmainham Jail Museum is one of the most interesting places in Dublin and had been recommended by Lennie Norris, an Englishman who earned an M.S. from our department. This is the largest unoccupied jail in Europe, where the British used to lock up and execute Irish patriots. Take a hankie with you if you want to visit. I had to keep my eyes wide open so that the tears wouldn't roll out while listening to the docent.)

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Facilities News

NEW MEDIA, GAMING, AND VISUALIZATION ROOM

By Terry Wright

The Media, Gaming, and Visualization room in MSCS 214 is a reconfigurable meeting room comprised of tables and chairs which can be rearranged to create a meeting setting as desired. It contains a Polycom Televising system married to projectable dry erase boards and green screen corner for closed circuit telecasts over the OSU ITLE system with high resolution gimbal mounted HD camera and projector. Telecast meetings with the Tulsa and other OSU campuses can therefore be arranged. Furthermore, there are six high performance quad core 1900x1200 video resolution computing machines residing in the room. Three are towers and three are laptops. An mgv (Media, Gaming, and Visualization) administrator account with password protection is available for faculty and a limited unprotected account exists on each machine with full internet access. The machines are locked to the tables. However and by request, the laptop can be unlocked and put on loan. The Media, Gaming, and Visualization lab is open 9am to 5pm daily for anyone to access unless it has been scheduled for meetings.

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Personnel changes

NEW FACES IN THE DEPARTMENT

Since the last newsletter there have been a number of personnel changes in the department. Dr Istvan Jonyer resigned as an assistant professor and has moved to the Pittsburgh area to pursue other interests. Dr Gopal Rao and Dr Michael Toulouse joined the department as visiting professors. Finally, but not least, Tracy Tipton joined the administrative staff. Good to have you all here!

INTRODUCING
DR. JOHN CHANDLER

The editor of this newsletter requested Dr. John Chandler to write some autobiographical remarks, and Dr. Chandler rambled on somewhat aimlessly as follows. (This is Dr. Chandler's description, not that of the editor.)

Orange Computing: Tell us something about yourself, where you were born, childhood, college, employment and, computing related experiences.

Dr Chandler: I grew up in Clarion, Pennsylvania. My father was president of Clarion State Teachers College, which is now Clarion University of Pennsylvania, and we lived in an apartment on the college campus. After graduating from Clarion High School I went to Lehigh University on a Union Carbide scholarship that paid for my tuition and books. Lehigh is in Bethlehem, Pennsylvania. In those days Lehigh was primarily an engineering school; now it is a comprehensive private university. Although it is not widely known, Lehigh is currently ranked #35 by U.S. News & World Report among "National Universities".

I graduated from Lehigh in 1957 with a B.S. degree in Engineering Physics. I spent the summers of 1957 and 1958 working for IBM in Endicott, New York as a computer programmer in the Scientific Computation Laboratory. I worked on a program to optimize the wiring of computer back panels and a simulation of a proposed new computer, the IBM 750. We programmed in assembly language for the IBM 704 computer. We also studied a new computer language called FORTRAN.

FORTRAN was seen as merely a means of "formula translation", from which it got its name, not as a general purpose high-level programming language. No one I talked to foresaw that high-level languages might replace almost all assembly language programming. All programming was done on 80-column IBM punched cards. I started out at a pay rate of $525 per month, which was at the top of the pay scale for a graduating engineer in 1957.

In the fall of 1957 I entered graduate school in physics at Indiana University in Bloomington, Indiana. While my advisor was switching subfields within physics, I spent 1961-1963 working in the Harry Diamond Laboratories of the U.S. Army in Washington, D.C., where I worked on the design of microwave antennas and of encoded radar signals, among other things.

I completed my Ph.D. in physics from Indiana in 1967, specializing in the experimental physics of elementary particles, and continued for another year as a postdoctoral research associate in the same group. At this point my work was almost 100% programming, plus studying numerical methods and developing statistical and computational methods for solving research problems in physics.

I spent 1968-1970 as a Staff Physicist in the particle physics group at Florida State University.

Early in 1970 I got a telephone call at work from Dr. Donald Fisher, who was starting a new Department of Computing and Information Sciences at Oklahoma State University. Dr. Fisher had gotten my name from my research advisor at Indiana, Jack Martin, whom Don had known when Don was director of computing at the Indiana University Medical Center in Indianapolis. I interviewed at OSU and Don offered me a position as Assistant Professor at a salary of $12,500 for the academic year. This was less than I was making at Florida State, but I was attracted to the idea of becoming a faculty member and I accepted the offer immediately.

In the August of 1970 I reported to OSU and met my new colleagues, G. E. "Woody" Hedrick, who had just finished his Ph.D. at Iowa State University, and Donald W. Grace from Procter & Gamble in Cincinnati.

Orange Computing: What do you do to keep yourself amused?

Dr Chandler: I read fairly widely. I like to write computer programs. As Jim Van Doren used to say, "I can only go for a few days before I need a programming 'fix'."

I enjoy playing table tennis and racquetball. When I first came to OSU the OSU Chess Club had 220 members because of the popularity of the game during the Bobby Fischer era, and I was #2 on the ladder tournament the Club ran, but since the 1970's I haven't played any chess except at home with my family.

Orange Computing: What do you see as the main changes since you joined the department?

Dr Chandler: It has more faculty now, of course. Computer science majors in 1970 were all graduate (M.S.) students, almost all of them were U.S. citizens, and almost all of them were male.

To earn tenure, a faculty member was not required to obtain external funding.

Getting external funding did provide extra "brownie points" toward promotion and raises, of course.

Orange Computing: What was computing at OSU like in the seventies?

Dr Chandler: In 1970, the only computer available to us was the IBM 360/50 mainframe computer in the basement of the Mathematical Sciences (MS) Building. If a user wanted to run a computer program, the user went physically to the basement of the MS Building, taking his or her program along, either in the form of punched paper cards or on a magnetic tape. If the program was small and had a short run time, the user ran the card deck through the card reader and, a few minutes later, tore off the fanfold paper output that came out of the printer. The printer was an impact printer, and rather noisy. If the program was large or ran for more than a few seconds, the user submitted the program to the machine operators through a window and came back later to pick up the output.

The introductory computing course was COMSC 2112, which is now CS 1113.

COMSC 2112 used FORTRAN. Except for object-oriented programming, which had not yet been invented, the course content was about the same then as it is now: constants and variables, arithmetic, assignment statements, branching, loops, and arrays.

The main applications program at OSU was BMD, a statistical package written at UCLA, that ran on the IBM mainframe computer. If one wanted to use the computer much beyond running a BMD analysis, a person had to program the computer himself or herself, or pay someone else to program it. As a result, COMSC 2112 had up to 1100 students per semester. Lectures were on videotape, watched in lecture sections in MS 101 and MS 108, and there were discussion sections with a teaching assistant as instructor in each section.

The night before a COMSC 2112 assignment was due, there would be a line of students the full length of the corridor in the basement of MS. The wise user who was not in COMSC 2112 would leave and come back the next morning when there was no line.

There were keypunch machines in the basement of MS for users to use. OSU would not pay to send a staff member to IBM school to learn how to fix the keypunches properly when they broke, so only a few of them worked well. Experienced users knew which machines were the good ones!

There was a large room in one corner of the basement where keypunch operators, all of them female, worked during the day punching cards and then verifying them, from printed matter provided to them.

Personal computers did not exist, and there wasn't any interactive computing at OSU. (MIT and a few other places had interactive computing.) The only person we had read about who had his own computer at home was a staff member of Livermore National Laboratory in California, who had bought a surplus IBM 7030 Stretch supercomputer for five cents a pound and had installed it in the barn where he lived.

If a user heard about a useful program that existed somewhere else, the user wrote or called to try to get a copy of the program, either on punched cards or on a magnetic tape. A program could usually be obtained from a university or government laboratory for the cost of reproducing and mailing it. If a user visited an institution that was known to have a large library of useful programs, such as the University of Wisconsin, Brookhaven National Laboratory, or Argonne National Laboratory, the user was wise to get free copies of all programs there that were likely to be of use, plus a copy of their documentation which was on paper.

Orange Computing: Tell us about some of the characters from the early days of OSU computing:

Dr Chandler: Shortly after the department got the IBM 1130 computer in MS 214, a student from East Central University named John Scott enrolled in our M.S. program. John was an expert on the 1130. One day John was sitting in the far corner of MS 214 from the computer, with his back to the computer, talking to another student, when he turned around and said to the person trying to use the computer, "You forgot your RUN card." "What???" "Your card deck doesn't have a RUN card at the end." Of course John was right. John knew that when the RUN card was omitted, the card reader gave one extra click, and he had heard that extra click and was trying to help the user.

Whenever a user built a sequence of new files on the 1130 disk, the operating system would add a dummy separator file named 1DUMY. One day Bill McDaniel, a friend of John Scott's, added three new files named, respectively, JOHN, SCOTT, and IS, so that the directory listing now ended JOHN SCOTT IS 1DUMY. John Scott thought that that was reasonably amusing.

Another time, graduate student Cliff Hoyt was rebuilding the operating system on the hard disk of the IBM 1130, an operation that required running three drawers of punched cards through the card reader. I was standing by the console, idly flipping my keycase in the air and catching it. I failed to catch one flip and the keycase came down on the INT REQ (Interrupt Request) key, terminating the load operation and requiring Cliff to start all over again. The next day Cliff found a discarded typewriter cover. He labeled it "CHANDLER GUARD" and from then on, when anyone needed to rebuild the system, he would place

the CHANDLER GUARD over the console keys so that I would not be able to mess up the operation again.

Exams for COMSC 2112 were printed by the mainframe computer in the machine room in the basement of the Mathematical Sciences Building. One enterprising student machine operator stole a copy of an exam. He and a friend rented a room at the Holiday Inn hotel and sold copies of the exam for ten dollars each, wearing paper bags over their head to avoid identification. Carl Provence, a lecturer in the department, heard about this and took a police officer to the Holiday Inn. The students were arrested and prosecuted.

To use the mainframe computer required the use of IBM Job Control Language (JCL), a complicated and arcane mess. A faculty member once requested that the system print thirty copies of a computer language manual for use in a class. Due to an error in his JCL, the computer printed thirty-squared copies, that is, nine hundred copies. A hundred or so of these copies were used in the semesters that followed until the use of that language was discontinued, then the rest were recycled.

To avoid saturating the mainframe computer prematurely, and because of practices related to the funding of computing time for grants and contracts, the usage of the computer was limited through the allocation and use of "funny money", essentially the allocation of a certain amount of computer usage to each OSU college and from there to each department. If a faculty member exhausted his or her funny money prematurely, he or she had to go beg the department head for more, and the department head then had to go beg the dean for more. When the funny money for a given course was temporarily exhausted, a "No funds available" message was given whenever a user attempted to run a program. This happened one evening in the room where users read in their programs: a COMSC 2112 student ran his deck of cards through the card reader and got the "No funds available" message. "What am I supposed to do?" he inquired of those in the room.

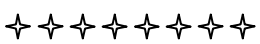
One graduate student suggested, "You might try putting a dollar bill behind your job card and running it through again." Then the graduate student went home. Unfortunately, the neophyte followed the suggestion. The card reader jammed on the dollar bill and it took the IBM Customer Engineers a long time to finish picking all of the scraps of the dollar bill out of the card reader.

Each short job that was read in by a user on the IBM 360 was limited to a total runtime of five seconds. One graduate student in engineering split his thesis program up into about fifty short jobs of a few cards each that he would run through the card reader at one time, which would then tie up the printer for several minutes. This was not exactly according to the rules, but the Computer Center did nothing to control it.

Orange Computing: Did you know the infamous 'Delbert'?

Dr Chandler: 'Delbert' (not his real name) was a computer science graduate student who hacked the IBM 360 system. When the engineering student put his card deck into the reader, Delbert would step over to the remote console nearby and type in a command. When the last card had been read, Delbert would hit RETURN on the keyboard and the engineering student's fifty jobs would disappear out of the system without being run. Eventually the Computer Center figured out what was happening, and the next time Delbert canceled the student's jobs, operations manager Jim McGee came running out of his office, closed the door of the room containing the card reader and console, and demanded to see everyone's ID card. Delbert was caught and disciplined and never did get his M.S. degree. He was hired by the Bank of Oklahoma to work in computer security. Some time later an article in the newspaper reported on a shadowy figure that had been seen late at night in the hallways of the Bank of Oklahoma by security guards. The guards never were able to catch the shadowy figure. After Delbert left the bank to go to work for American Airlines, the shadowy figure was never seen again.

Orange Computing: Thank you. Looks like Computer Science had some colorful, interesting and dodgy characters.



"In C we had to code our own bugs. In C++ we can inherit them."

Source: http://www.juliantrubin.com/computerjokes.html

Student News

THE INTERNET
GAMES, MONEY, FAME, ...

By Parth Dalal

With over a billion people using it daily, the Net is by far the easiest way to get publicized and possibly earn a little cash. Even though income was not my motive eight years ago, it was then that I first discovered the true power of the World Wide Web. At the age of twelve, determined to build the greatest game, I got busy with a game-development tool tailored towards beginning programmers.

With the help of this software, I created something that I would now consider not so stunning. But it was my first major creation, and excited as I was, I uploaded it to CNET Download as freeware. The very next day, the first thing I did was hop on my computer seat and excitedly navigate to Download.com to see how many people had checked out my creation. "I really hope maybe twenty people played my game!" Well, I was surprised out of my mind when the number of downloads topped a thousand. And the next few weeks they continued to increase rapidly.

Lucky for me, I had included my email address within the game itself, and among the many mails I received daily regarding the game, one caught my eye. It was from the CEO of an online company telling me he loved the game. "A CEO? Seriously!? What is this!?" It sounded important so I called my dad to check it out. Sure enough, it was a business proposal. The guy was willing to pay me based on the number of downloads I got, and he would even host the game on his fast server! What did he get out of this? Well, he would include his advertisement in the install program for my game. It seemed like an intelligent mutually beneficial offer to me. My dad told me that it was up to me whether I wanted to go through with the deal or not. I was definitely for it.

So in a few days after I accepted, a business contract appeared in the mailbox. After I went through it with my dad, I signed the contract and we sent it back. What happened after that? In only a day, my game had been submitted to who knows how many websites, and my name, 'Parth Dalal', was now written on what may have been hundreds of servers worldwide.

Who cared that I was in a business contract? For my innocent self, it was all in the fun and excitement of my game becoming known – of my game becoming like a professional product. "I made this! And people are downloading it just like they would any other game!" This thrill did not end, even when the business contract finally did. At the end of the whole saga, I had gotten my game advertised to a ton of websites, and earned my first small income of 600 bucks. It was a great inspiration to my friends, but most importantly, it was an inspiration to myself.

Five years down the line, with a growing interest in magic tricks, I made an illusion of my own. Previously awed at what was possible through the Net, I decided to try my luck with a popular online magic company, Ellusionist. In the morning, I sent them a description and demonstrational video of the card trick I had made and then waited. Later that evening, my heart pounded when I found a response from them sitting in my inbox. I opened it preparing for rejection, but to my surprise, they were impressed with the trick and were going to consider marketing it on their webpage!

After a few preliminary procedures and extensive verification of originality, the company acquired the copyrights to my trick and it was available on their website under the name 'Axis Change', heavily marketed. Best of all, I would get a significant royalty. With my first monthly check exceeding two grand, my faith in the Internet had been reaffirmed. To this day, I receive royalties on my magic trick, although they have significantly declined. Inspired by my success on the Web, and while studying Computer Science at Oklahoma State University, I will continue to explore possibilities online. The Internet offers a myriad of opportunities for any skill. You just have to look.

Parth Dalal is a sophomore in Computer Science at Oklahoma State University.

GET TO KNOW A STAFF AND ARTIST

TERRY WRIGHT

This newsletter is not only about computers only. Terry Wright has a talent that few Computer Scientists possess – he is a painter and a good one at that. Here he tells us a little bit about himself and his interest in art.

Terry: I was born in Tulsa, Oklahoma July 5th, 1957 just after midnight and enjoy fireworks every year around my birthday as the U.S. and I celebrate our respective birthdays. I grew up in a modest household with all the typical trials of a childhood. I walked to school many miles for most of my K-12 life in all kinds of weather; consequently I have come to enjoy the outdoors. Early, I embraced both science and art with an emphasis on observation.

Science was first. I was introduced to vacuum tubes when I was seven years old by my engineering grandfather; I learn how they operated and how to test them then went on to understand passive components such as capacitors and later transistors. He and I repaired televisions when they were full of tubes and black and white. I have repaired many a system down to individual components. From that early learning I came to understand the world of Physics and how to observe. From observing came the ability to "see". Out of that comes some modest ability to paint landscapes. Of course understanding waves functions from Physics, I also enjoy music. I am a constant student of piano, guitar, and singing.

Time passed and I found myself at an all black non-integrated high school in the 1970s where I learn the meaning of black culture and the pride they have for their race. Here I developed an interest in Biology and along with loosing my sister to diabetes, I enrolled in health sciences at the University of Tulsa upon leaving Booker T. Washington High school. I majored in Microbiology and upon graduation went to work at a hospital Microbiology laboratory. After working a few years, a biomedical company specializing in cardiovascular patient monitoring attracted my attention and my employment. Along with a modest raise in pay I was able to put my feet in two worlds, Medicine and Electronics, folding in my early training in electrical technology my grandfather gave me when young. The company grew and developed a product for which they employed me to build, train, in-service hospital staff, and collect the checks. At this point, I began to travel; being young and single I enjoyed it. As the company's product began to wind down in a limited market and sales dropped off, I noticed an ad in the paper for an aviation company creating aircraft simulators. In those days, people went to the newspaper for employment. I answered the ad and spent eleven years earning how to computer simulate a real world flying environment and aircraft. There I progressed from writing software and math modeling to working in their operating systems group. It is at that point my direct work in computers as the object of my work instead of using it as a tool began. The list of early machines began to be listed on my resume, PDP-11, IBM, and so forth. With aviation's economic downturn in the late 1980s, I went through my first and only lay off in 1993.

Moving to Stillwater, I worked in field service using my computer knowledge, training, and experience all the while incorporating that early training in electronics from my grandfather. After three years in field service, I decided a degree in engineering technology made sense and enrolled at OSU in the fall of 1997. During the process, I took classes in computer science where I met Dr. Hedrick. Shortly before graduation, I noticed an advertisement on the OSU Computer Science web site and answered it whereupon I interviewed with Dr. Hedrick and Dr. Park. I was hired in 2001 where I work today.

I believe I am a generalist with a consistent interest in the Physical world and how it accomplishes its daily miracles. The oil painting was done at that time I was simulating visual systems for aircraft; it put me in the mindset and while still single I had time to unwind from trips around the country and overseas. I enjoyed a time at Oral Roberts University in pancreatic research whereupon I had my first post-graduate exposure to research. As I worked at OSU, I worked for a research in heat pump technology on this campus furthering my experiences in the research process.

I know so many people who have done more and to a greater degree of ability. It is why every time I learn - the sense of what little I know and can do keeps me with perspective about my place in the world.

Two of Terry's paintings and the thoughts behind them (in his own words)

Title - "Finally time together". The painting has both loving and stylistic interests. It reflects two capable people who live in a world depending on them. They have some time together; the theme is beautifully simple. The sand was an experiment in a style of painting where the basic structure of oil is laid down and then blended with solvent.

Title - "Build bridges in a place of beauty". It reflects a desire to express engineering can live in harmony and in so doing aid people in their daily lives. The Golden Gate bridge which is the one in the painting helps commuters quietly and daily on their way. It is so large when the city completes painting it at one end, they start over on the other.

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Imagine

Imagine there's no Windows,
It's easy if you try,
No bugs annoy us,
Completely free to try.
Imagine all the people
giving code away...

Imagine there's no companies,
It isn't hard to do,
Nothing to hack or crack for,
No UNIX too,
Imagine all the people
giving code away...

Imagine no computers,
I wonder if you can,
No need for geek or hacker,
A brotherhood of man,
Imagine all the people
Sharing all the world...

You may say I'm a loonie,
But I'm not the only one.
I hope some day you'll join us,
And the world will live as one.

Source: http://www.juliantrubin.com/computerjokes.html

Staff News

BEAU TURNER TIES THE KNOT !

Isn't this a great looking couple or what!!

Our Congratulations to Beau Turner who got married on January 15, 2008 to Craig Smith. Craig was living in Garber, OK when Beau met him. She has a college friend that lives there and teaches with Craig's sister and that is how they met. We wish them a long and happy married life together.

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Editor's Note

Welcome to the second issue of 'ORANGE COMPUTING', the newsletter of the department of Computer Science. The Computer Science department is turning 40. More details on the 40th anniversary celebrations of the founding of the department of Computer Science will become available early next year. Ideas and suggestions from students and alumni on celebrating this milestone are most welcome. Please email your thoughts to Dr Xiaolin (Andy) Li at xiaolin@cs.okstate.edu. Our department is one of the older ones in the country and established during the same period as some of the bigger and better known schools. Purdue celebrated its 40th anniversary in 2003. Stanford University's Computer Science Department was founded on the 9th of January, 1965. Brown University's Computer Science department was established in 1979, 10 years later than ours. Other departments are more recent such as the University of Northern Iowa's Computer Science department which celebrated its 15th anniversary last year. Thank you very much to all those who contributed to this issue. This newsletter would not have been possible without your input. Your input and submissions make my task enjoyable and worthwhile.

A Happy Christmas holiday to all and with best wishes for the New Year

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Faculty, classmates as well as currents students are interested in you and your career after finishing at OSU. Any information that you can send us will be circulated to departmental faculty and staff and will be printed in the next issue of Orange Computing. Please let us hear from you.

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