Register Now for the CIS Fortieth Anniversary Celebration

Well, while it doesn’t seem like yesterday, it doesn’t seem all that long ago either. Maybe you were here in the early years of the department, when we were housed in the Computing Center, programming assignments were submitted on punchcards, you waited two hours to find out if your program compiled, and courses in Advanced JCL and SNOBOL were popular. Maybe you were here when the department was on the ground floor of PLC, introductory courses had 300 students, and you waited over an hour, even after midnight, to use a terminal.

Maybe you were here when FORTRAN, Pascal, Scheme, C++, or Java served as the primary programming language of the major. Maybe you were here when the department purchased a PDP-15 and established its own lab to relieve some of the pressure on computing resources for upper-division courses and research. Maybe you were here when the department moved to its current home in Deschutes Hall, with its own local network, Unix computing environment on Sun workstations, iMacs, and student laptops, and when courses in networking, human-computer interaction, and software engineering were in demand.

Maybe you were here when the founders, Dave Moursund and George Struble, led the department, or when Steve Hedetniemi, Gene Luko, Zary Segall, Sarah Douglas, Michal Young, or Andrzej Proskurowski were department head. Maybe you were here when Barb Korando, Jan Saunders, Betty Lockwood, Cheri Smith, or Star Holmberg helped you through the hoops.

The department has changed and continues to change in many ways: leadership, faculty and staff members, building, computing technology, curriculum, research programs, students, and so forth. However, some things remain the same: the challenge of the educational program, the camaraderie among students working on course projects, the fond memories of parties, games, and trips together, and, finally, the thrill of graduation.

Our fortieth anniversary celebration this spring, during the weekend of May 1, 2010, will give you a chance to renew memories of the department and add a few new ones. We hope you can make it to the party and look forward to seeing you soon.
Talking head
AN OPEN LETTER FROM THE DEPARTMENT HEAD

April 2010

Fifty years! For some it is a lifetime, for some the span of their professional life; for most academic disciplines, a trifle (Euclid’s Elements are over two millennia old, Newton’s Principia is over three centuries old), but for computer science? Not many universities had an academic department of this name, or offered any courses dealing with computing, in 1960s. Yet, over forty years ago, the University of Oregon had the vision of great things that would come with further development of electronic computing devices, and the foresight to establish the Department of Computer Science.

I was not yet in Oregon then—but arrived in Eugene some five years later, after a two-day drive from California. On my way north I saw the freeways turning into country roads, and the golden hills giving way to the emerald mountains. Many of you—like me, transplants from someplace else—must have felt the same feeling of awe as I did during the first drive to the Oregon coast, on the steep climb to the Cascade Mountain passes, or at the first glimpse of Crater Lake. A different type of a surprise was the Lane County Fair, where I saw a rodeo and a horse show for the first time in my life—talk about culture shock!

And the computer science department: a few offices on the second floor of the Computing Center, reluctantly supported by the center’s secretaries. We, young first- and second-year professors, were creating graduate courses as we were teaching them. I taught Operating Systems, Data Bases, Computer Architecture, Modeling and Simulation, alongside Theory of Computation, and Algorithms. The students did their computing on the IBM mainframe, with few batch computation runs per day. One of the impediments to completing an assignment was the lack of text on punched cards: you had to run them through a mechanical “translator,” or interpret the hole pattern visually. The faculty members had the privilege of renting acoustic 300 baud modems for a couple of hours at a time. When our computer budget ran out a couple of weeks before the end of the term, that also signaled the end of computing that quarter.

Doing research was tough while we were teaching six courses a year, most of them for the first time. I still remember the thrill of the first acceptance of a conference submission (for a regional ACM conference), and then, a few years later, when a group of us got the first NSF grant in the department’s history. The department offices were then in the daylight basement of Prince Lucian Campbell Hall, arguably the building with the best view of campus, because you cannot see PLC from its top. Some of us remember building tables and carrels for our computer lab’s first “intelligent terminals.” Jed Marti directed the carpentry brigade, one of the long list of colleagues who passed through the department during my years, starting with Dave Moursund and George Struble, Sudhir Aggarwal, Gary Ford, Peter Moulton, Terry Beyer, Steve and Sandee Hedetniemi, Bert Shaw, Carla Schlatter-Ellis, Natalie Dehn. More current names can be found on the departmental posters displayed on our Facebook site.

But that was then. This year, we have welcomed our newest colleague, Daniel Lowd, a graduate of Harvey Mudd College and the University of Washington. After four decades of the department’s existence, we are housed in the elegant Deschutes Hall. We have among us four Fulbright scholars, five recipients of NSF Early Career Awards—and two ECE graduates! This year, departmental faculty members have a total of $7.6 million in research grants and contracts (not counting another $10 million in grants through interdisciplinary centers and institutes). We serve on technical program committees of conferences, and we organize international workshops and summer schools. Our alumni are employed in computer-related businesses, research and development labs, and on the faculties of computer science departments across the country and beyond its borders (in Canada, Mexico, Iceland, and Norway, to name a few.)

I am looking forward to talking soon with our alumni from the past forty years—many of whom I still remember, or will recognize when we meet. I hope you’ll be able to join us. I’ll see you in two months!

Andrzej Proskurowski
Professor and Head
Computer and Information Science

@UOregen is the newsletter of the Department of Computer and Information Science at the University of Oregon.

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UNIVERSITY OF OREGON

* Isaac Newton published Philosophiae Naturalis Principia Mathematica in 1687. On the other hand, al-Khowarizmi lived twelve centuries ago and lent his name to the concept of algorithm, central for computer science—but I doubt he knew that.
Alumni News

Carl Howells—Highly Functional Twenty-first-Century Bufflehead

Carl Howells '03 was well-known as an achiever within his peer group and is now contending with a field of computer scientists not as adaptable as his standards. At the UO, Carl was a member of the Buffleheads, a team in the ACM International Collegiate Programming Contest, which went to the world finals in 2002. Carl programmed alongside Dan Stutzbach and James Marr to win first place in the regional conference, the only team to solve six problems that year. Unfortunately, the team did not place in the world championships, but is still lauded as the last group of UO students (to date) to make it to the championships.

Like many UO undergraduates, Carl also worked as a student researcher while earning his degree. "He was the best kind of undergraduate researcher," said Professor Michael Young, about Carl when he was at the UO. "I would explain what I wanted, and in a few days he would show me what I asked for and another version with proposed changes . . . and usually his version was better."

Carl has been working for Janrain, a software company that recently left its site at John's Landing for the middle of downtown Portland. Janrain provides web user interfaces for such diverse customers as Fox News, date.com, PayPal, and Lewis and Clark College. Carl was recently promoted to senior engineer on the main RPX project, but the company has had a difficult time recruiting trained programmers. "We aren't necessarily looking for people with Haskell experience, just good programmers who are adaptable enough to write functional programs." Carl's team is supposed to consist of him as leader and nine programmers, but they are having a difficult time finding people who are able or willing to switch from the procedural programming to which they are accustomed, to the functional language they use at Janrain.

Paul Bloch, From the UO to Start-up and Back: Challenges of a SysAdmin

For many of us, Paul Bloch '79 has been a fixture on the computer science systems staff, but the road to the UO was paved by intentions of becoming a biologist, a torch that he has passed to his son.

Paul's computer science background began at North Salem High School, where he learned to programming on a PDP-8 in the '70s; however, he came to the UO wanting to become a biologist. "I was always passionate about biological discovery, but when I took Art Farley's introduction to computer science course, it seemed easy to me. So, I decided to dual major in biology and CIS." As an undergraduate, he worked on a research project for the biology department. A huge project at that time, the Coniferous Forest Project used computer modeling techniques to model the forest biome. Paul also spent a good share of his time in the computer labs at the department's home in the Computing Center.

After graduating from the UO, Paul started a business called Zephyr Computing with two of his fellow students. They continued to work for biology professors, but also did contract work for other clients. "We did odd jobs, like programming the stacking machine for the Eugene Register-Guard to correctly stack each delivery," he remembers. "Not just low-level, machine language projects, but databases, small business applications, financial software, you name it. I began to feel like I was unemployed: every time I would start a new job, I would have to start looking for the next one." Eventually, his partners, both married with children, decided that they would rather have work stability, so in 1983, they dissolved the company.

Paul then got a job for the psychology department programming statistical analyses. "Since I was on staff at the UO, I got a great deal on tuition, so I started taking CIS courses again. After a year, Kent Stevens hired me as a sysadmin for the department."

As a sysadmin, Paul has seen his share of computer systems come and go. "When Kent first hired me, he said, the department had already split with the Computing Center to headquarter in PLC. They had the IBM and DEC-10s', while we had two VXAXen and some Symbolics 3600s'. When the department moved again to its current headquarters in Deutches Hall, they began with a small HP 68030 box running BSD UNIX in the machine room and then we got some Sun workstations for Room 100. A couple of the faculty members had Symbolics LISP machines in their labs.

All of this change has created a constantly changing body of knowledge that the systems staff continually adapts to. "I just have to stay one step ahead of the professors," he explained. "We all spent the first bit of our life as a sysadmin just barely hanging on with the knowledge we had, but eventually, you become seasoned to the job."

On a personal note, Paul was introduced to his wife, Jane, by a roommate and they dated through her M.A. After a long career in teaching she works as a consultant for a variety of organizations including ISTE, which was started by Dave Morusand, a former computer science professor. ISTE has published her first book, and she is working on a second. Jane also consults with NCWIT, the National Center for Women and IT. Paul and Jane have a son, John, who is a junior at the UO. John plays on the UO Ultimate Frisbee team. Though he enjoyed the level of play, John found playing on the A team too serious and time-consuming, so he stepped down to the B team. He now plays on that team with CIS student Jed Clinger, son of Paul's former colleague Professor Will Clinger. John is pursuing a major in biochemistry with an intention to study medicine, taking his father's passion for biology one step further.

Internationalization Curriculum Continues Strong

Spearheaded by the UO, it includes many institutional and industrial partners from the Pacific Northwest. This new program will include students from those institutions, but has fifteen of the twenty-five American slots reserved for qualified UO student applicants. There will be an additional twenty-five students from Asia. The program is targeted toward junior and senior level undergraduates or first-year graduate students.

Ginnie Lo explained, "The summer school will provide an intensive hands-on class in which teams of students will work on a software development project while dealing with the challenges of language, cultural, and (simulated) time zone differences." The curriculum will be a two-week intensive lab-based experience with courses on cross-cultural communication, international computer ethics, and topics in computer science. The students will be organized into small, intercultural software teams. The school directors will be Professor Andrzej Proskurowski, head of the UO Department of Computer and Information Science, and Professor Zhong Chen, dean of the Peking University School of Software and Microelectronics.

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Wanting to Reconnect With Campus?

Contact the
College of Arts and Sciences Development Office
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We can provide you with:
• information about outreach activities
• specialized tours of campus
• opportunities to help shape the future of the university
Student Profile

Elijah Hamovitz—From Humanities to Computer Science, It's All About the People

Elijah Hamovitz came to the University of Oregon not knowing that he was interested in computer science, but looking for an alternative to his humanistic upbringing. Like a number of CIS students, Elijah was homeschooled through the end of his high school years. "My family participated in a program through the Gutenburg College," he explained. "The program partnered a group of homeschooled kids with professors from the college. After spending all those years learning about humanities, I feel like I became a much more critical thinker, but when I came to the UO, I wanted to turn to something more systematic and objective." Elijah was drawn to computer science as the study of the nature of the universe. "Hearing that computer science was the objective study of limits of possibility interested me," he said. He also liked the constructive aspects of programming and software architecture.

At the UO, Elijah enrolled in the Robert D. Clark Honors College. The atmosphere promised to be the personalized atmosphere he was accustomed to. "However, I find that the computer and information science department is just as friendly as the honors college," he said. "Other folks in the honors college find that their major department is large and impersonal, so they like the atmosphere better in their honors classes, but I find that the professors I know better are CIS professors, and definitely the friends I've made in the CIS department outnumber my HC friends."

Within the computer science department, Elijah is the president of the student ACM club. He also spearheads the Wednesday night game group. He said, "The game group is just a chance to get together as students in the CIS department, play board games, and exchange gossip." Jim Allen, the department outreach coordinator, said of Elijah, "I think that the kinds of social opportunities and extracurricular activities the ACM is supporting are important for student success. Although the students may be sitting around playing Settlers of Catan, they are also talking about what they have learned in their classes, both academic and procedural. In this time of computers in every home, it is a big temptation for students to do their homework at home and never really speak to other computer scientists. I feel that it is important to discuss the issues brought up in class with the other students. I really appreciate what Elijah has done with the ACM to provide the social network necessary for the department to prosper."

Elijah likes to tell the story about his friend Brice. "I have a friend from out of town, who came to one of our game nights. After playing Order of the Stick and hearing us talk about the things we study, he went home and changed his major to computer science. He said that he heard us talking about computer science concepts and was blown away by the topics covered. He never realized that computer science was so deep."

He was also impressed by the camaraderie expressed in something so simple as ACM game night."

Another reason for social networking is internship information. In 2009, Elijah worked part time at Pipe Works, a Eugene-based computer game producer. "I started pursuing that job since I became an undergrad, and they hired me once my programming skills got to a certain level," Elijah explained. "I have since moved on, but in the meantime two of my fellow students have started working there based on my recommendations."

Elijah, from Eugene and one of several siblings, is accustomed to being in a social environment. That environment is one that he has found in the computer and information science department, and one that he has helped to preserve. Jim Allen said, "I always give the students the message that they should stay here with two good recommendations, not just a bunch of course work. I really feel that Elijah and other students like him pave the way for that to happen. Elijah's programs have helped other students find internship and part-time work possibilities, decide which professors are a good match for their research internships, and know what is ahead in terms of course work to complete the major. He has the vision to see that social networking within the department is very valuable indeed. Or perhaps he just enjoys board games. Either way, it is the same outcome."