



A defining moment for CS at Illinois!

Tom Siebel sparks department growth with magnificent gift

Entrepreneur and alumnus Tom Siebel, who founded software giant Siebel Systems, has donated \$32 million to the department. The gift is by far the largest in the department's history and the largest ever in the College of Engineering. The contribution will help build the Thomas M. Siebel Center for Computer Science, with the ambitious goal of making our computer science program number one in world.

The 240,000 square foot facility will be located just, northeast of DCL. By 2003, it will house about 100 faculty members and researchers, as well as over 2,000 undergraduate and graduate students. The building itself will be compelling, inside and out, and will be the epitome of a "smart" building. As a basis for re-



College of Engineering Dean Bill Schowalter, Dan Reed, and Tom Siebel envision the future.

search and education in computing systems that anticipate and respond to human activities, the building itself will be an evolving laboratory that contains the latest technology for mobile computing, distributed collaboration, and intelligent interaction. "The building will serve as a laboratory for exploring and evaluating 21st century computing environments," said department head Dan Reed, "where everyday devices have embedded intelligence and are able to adapt to context and use, sharing informa-

tion and user preferences via ubiquitous communication networks. Imagine, for example, an intelligent telephone agent that knows your schedule, your location, and even your mood, and uses that information to decide if an

continued on p. 2

North campus poised for development boom

High tech research park and incubator planned

The university is establishing two research parks, one of which will be adjacent to the Siebel Center for Computer Science. Both will contain incubators to assist start-up companies in their commercialization efforts and to improve ties between high-technology businesses and university researchers.

The north research park will focus on engineering sciences and information technology. In addition to close proximity to the Department of Computer Science and the Department of Electrical and Computer Engineering, two major research centers will be nearby: the National Center for Supercomputing Applications and the

Beckman Institute for Advanced Science and Technology. NCSA, currently housed in a number of buildings across campus, is also building a new facility. The electrical and computer engineering department plans to construct a new building just southwest of Beckman. The new complex will operate as a technology pipeline that couples long-term computer science research, prototyping and development, and technology transfer to start-ups and IT companies.

A second site on the south end of campus, near the College of Agricultural, Consumer and Environmental Sciences and the College of Veterinary Medicine, is

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Editor: Judy Tolliver

Computer Science Alumni News is published twice a year. Deadlines for submissions: March 1 for the spring issue, October 1 for the winter issue. Your input is needed and welcomed!


All ideas expressed in the *CS Alumni News* are those of the authors or editor and do not necessarily reflect the official position of the alumni or the Department of Computer Science.

Correspondence concerning the *CS Alumni News* should be sent c/o the editor, Department of Computer Science, 1304 West Springfield Avenue, Urbana, IL 61801, or to alumni@cs.uiuc.edu.

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Siebel gift, continued from p. 1

incoming call is important enough to disturb your meeting."

The Siebel gift could not have come at a better time. As most of you are aware, universities the world over face a shortage of graduate students and faculty. In addition, there is a critical shortage of information technology personnel. The new facility will not only help attract top graduate students and faculty, but it will also enable the department to significantly increase its undergraduate enrollment. The department already boasts one of nation's highest admission standards, but demand for undergraduate courses continues to rise. Our resources are taxed beyond capacity, and physically the department has outgrown its current space in the Digital Computer Laboratory.

"With this gift, Tom has placed tremendous faith in us," said Reed. "Our goal is to create an integrated education and research facility that will attract the world's best and brightest faculty and students, who will together shape the future of computing for Illinois and the world."

Dan Reed leads Alliance as Larry Smarr leaves

CS department head Dan Reed will take over the helm of the National Computational Science Alliance from Larry Smarr on June 1, 2000. NCSA, the National Center for Supercomputing Applications, is the leading-edge site for the Alliance. The Alliance is part of NSF's Partnerships for Advanced Computational Infrastructure (PACI) program, now in its third year. Its focus is the creation of major new information infrastructure components.

North campus, continued from p. 1

expected to include companies focused on biotechnology. The site is near the corner of St. Mary's Road and First Street. Located in a less developed area south of campus, it will have a more rural feel than the north research park. Motorola has already signed a ground lease to build a 72,000 square-foot research and development center there.

All tenants would have research, development, or educational relationships or affiliations with the University of Illinois, and the university would retain ownership of the land. Tenants can either build their own facilities or lease existing space, much of which is being built by the local development team of Fox Development and the Atkins Group.

If your company is interested in the research parks, please contact Tony Waldrop, Vice Chancellor for Research, at twaldrop@uiuc.edu or 217-333-0034.

From the corner office . . .

No little plans

Incredible! Amazing! Phenomenal! All are apt descriptions of this past year, but none fully captures neither the excitement nor the emotional surge created by Tom Siebel's marvelous gift.

At lunch last fall, Tom asked me about the department's aspirations and goals. In true academic fashion, I talked about educating a cadre of talented students, attracting and retaining great faculty members and graduate students, and conducting world-class research. After waiting patiently for me to pause for breath, Tom said, "Those things are all unimportant." Needless to say, I was taken aback and asked, "Why?"

"They're all artifacts," Tom said. "Your real goal is actually quite simple—to be the *best* computer science department on the planet. If you achieve that goal, everything else will follow—you'll have great students and faculty and your research will shape the future of computing."

I realized instantly that Tom was right. He had captured what all of us knew intuitively but had not articulated so clearly. So, let the record show that Illinois has pulled the Ferrari into the passing lane, powered in large measure by Tom's extraordinary generosity and his trust in the Department's future.

As I write this, we have just finished a series of meetings with Bohlin Cywinski Jackson (BCJ), the design architect for the new Siebel Center for Computer Science. By summer's end, we expect to have completed a high-level architectural design that integrates education, research, and technology transfer.

This new building, as the anchor for a new IT quadrangle on the north campus, will be home to over 70 faculty members, 550 graduate students, and 1,500



Graduate student Mario Medina uses screen in DCL's "smart room," a laboratory for prototyping smart space technology.



Tom Siebel talks with CS faculty members about the new building and the future of the department. From left to right, Mehdi Harandi, Sylvian Ray, Geneva Belford, Tom Siebel, and David Kriegman.

undergraduate students. As these numbers suggest, this world-class facility is backed by an equally extraordinary commitment from the university and the state of Illinois—a commitment to nearly double the size of the department, creating what we believe will be the largest computer science department in the country.

Not only will Siebel Center provide badly needed space for departmental growth, it will embody the future, enabling us to explore those computing tools and technologies that will shape 21st century computing. We are designing the building to support ubiquitous digital multimedia, enable distributed collaboration and distance learning, and foster impromptu interactions among students, faculty, and staff. Simply put, the building will help catalyze new research areas as well as provide the facilities for building on the department's historic strengths.

As I reflect on our opportunities and challenges, I am reminded of the words of the late Daniel Burnham, the city planner who shaped much of the famous Chicago skyline following the great Chicago fire: "*Make no little plans. They have no magic to stir men's blood.*" In just a few short years, his city plans created a skyline that is one of the world's architectural wonders.

Although information technology is transforming our world at a stunning rate, the rate of that transformation is often limited by an inability to imagine the future. The Illinois family, students, faculty, and alumni have seen that future, and it is extraordinary. The past and present are but pale prologues.

Together, we are going to change the world. No small plans indeed.

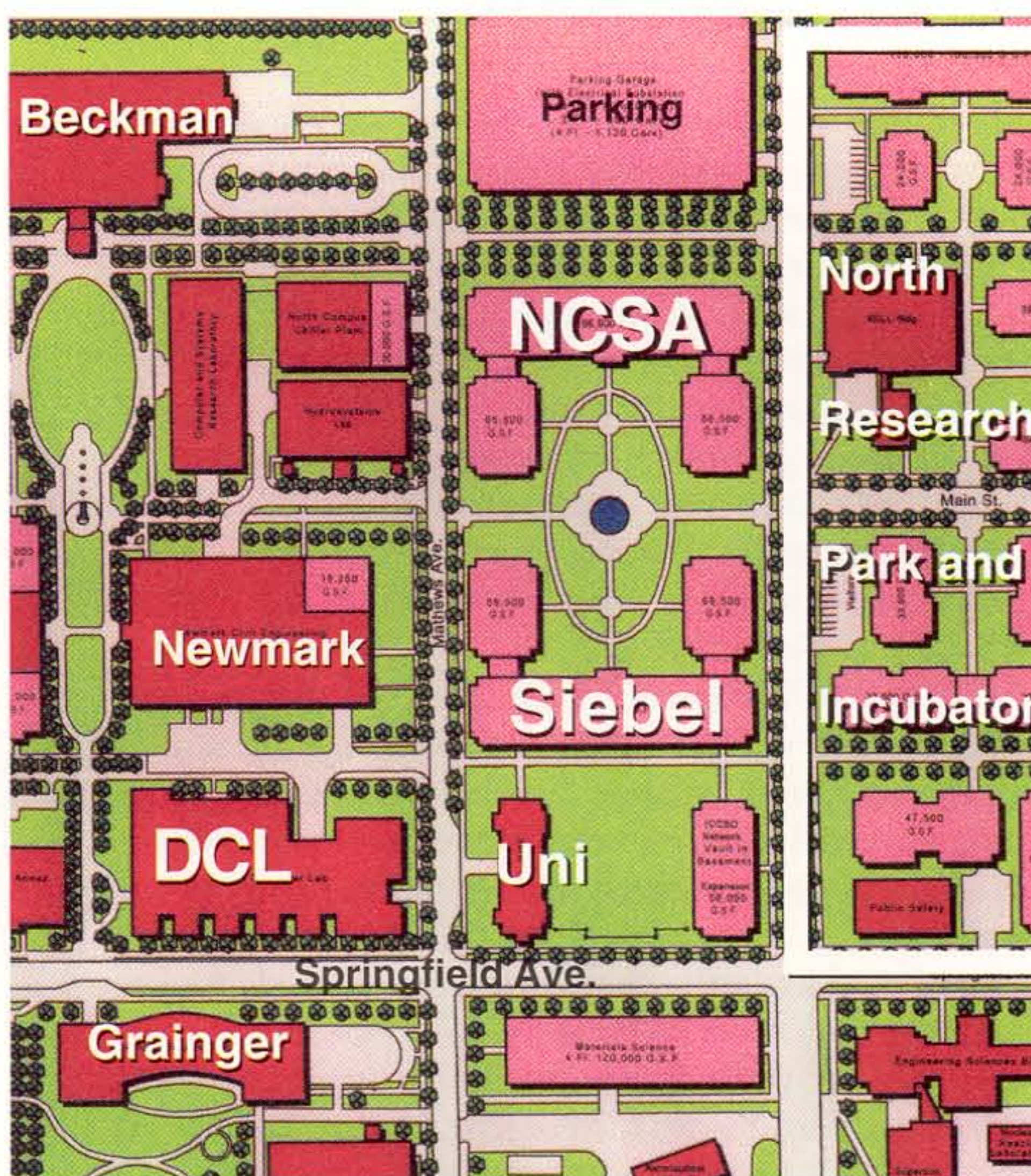
—Dan Reed, department head

Thomas M. Siebel Center plans underway

The designer for Siebel Center will be Bohlin Cywinski Jackson (BCJ), and the architect will be LZT, an Illinois firm. BCJ has designed several high-tech buildings, including the Software Engineering Institute at Carnegie Mellon University, Bill Gates's house, and the new Pixar Animation studio. BCJ is working directly with the department, and the design should be complete by the end of the summer. Groundbreaking will take place next summer, and occupancy is expected in 2003.

The Siebel Center will be just north of University High School and northeast of the current DCL. The map is a conception of how our part of the campus will eventually look. The exact footprints of the new NCSA building and Siebel Center have not yet been established, but together they will anchor a new quad. On the map to the right, University Avenue is the north border, Mathews Avenue runs between DCL and Siebel Center, and Goodwin Avenue is between Siebel Center and the research park area.

Visit our website, www.cs.uiuc.edu, to keep abreast of the latest developments. BCJ's website is www.bcj.com and LZT's is www.lzt.com.



Engineering Dean Schowalter to retire

College of Engineering Dean William Schowalter, 70, announced that he will retire in February 2001, after 12 years of service. Before becoming dean, Schowalter worked as professor and head of the chemical engineering department at Princeton University, where he also served as an assistant dean. The research capacities of the College of Engineering doubled during Schowalter's tenure, and this year the university received one of its biggest budgets from the state, including money for a new National Center for Supercomputing Applications building. Also during Schowalter's tenure, the Grainger Engineering Library was built with a private donation to the college. As he prepares to leave, plans for the new Siebel computer science building are underway as the college's premier capital project. Schowalter felt his greatest accomplishment was helping state officials realize "that technology is critical to the economic welfare of the state." An international search has begun to find a new dean. At this time, the Schowalters are undecided about where they will live. He plans to continue working in some capacity, maybe even in Champaign-Urbana.

iVentures fund to help startups

iVentures, a new campus venture, is a program designed to complement the campus research park and incubator facilities. It will target university-related companies that need early stage assistance. In addition to capital, iVentures will provide office and lab space as well as other services, such as legal advice. In addition to the financial rewards of commercially successful businesses, another potential benefit is the attraction and retention of faculty members. Entrepreneurial professors can remain on the faculty while commercializing their products, and jobs will be created locally for UI graduates and their spouses. A university task force is now looking for people to serve on its advisory boards, which are divided into technical and capital divisions. For more information on iVentures, contact Chet Gardner, Interim Vice President for Academic Affairs and a member of the iVentures task force, cgardner@uiuc.edu, 217-333-2152.

About Tom Siebel

Tom Siebel came to U of I from Wilmette, Ill., and he earned a BA in history in 1975. After working for a publishing company, he returned to the university for an MBA (1983) and MS in computer science (1985). Siebel was hired by Oracle Corporation as a systems engineer. Migrating to the business side of the company, he quickly rose to become the company's top sales person.



Tom Siebel

From there he moved into a variety of high-level management positions, including VP of Oracle USA, before leaving to become CEO of Gain Technology, a multimedia software company. In 1993, after Gain had become acquired by database maker Sybase, Siebel started Siebel Systems. Its first software product, Siebel Sales Enterprise, provided customer representatives with important information, including customer competitive and product data. The program ran on a database server linked via a wide-area network to sales people using PCs. The program was extended to automate the customer service function and is now part of the company's core product line, the Siebel Enterprise application. Siebel Systems's stock was the fifth best-performing initial public offering of 1997.

The 1998 acquisition of Scopus Technology, Inc., maker of customer service information systems, made Siebel Systems one of the world's largest in the enterprise relationship management marketplace. In 1999, *Fortune* magazine listed the company as the fastest-growing in America. Siebel is also an author. His latest book, *Cyber Rules*, talks about the history of the Web's first generation, electronic commerce, and how to implement a digital strategy.

Siebel made his first visits back to campus in 1998, to deliver a Department of Computer Science Distinguished Entrepreneur talk and to be a panelist for the College of Engineering's Higginson Forum on Entrepreneurship. Siebel then joined the College of Engineering Dean's Board of Visitors, a small group of alumni who are senior executives that advises the dean.

For a more detailed story on Tom Siebel and Illinois, see the Winter 1997 issue of this newsletter. Siebel's Distinguished Entrepreneur talk from October 1998 has been digitally archived. Both can be accessed by linking from www.cs.uiuc.edu.

An adviser recalls

by Geneva Belford

There are two questions that I get asked most often about Tom Siebel as a student here: 1) Could I tell he would become a billionaire, and 2) Was he an A+ sort of student?

No, to both! What I do remember is that he wanted to get the maximum value out of his CS degree. He approached his courses with intelligence and intensity, and unlike a lot of students, he wanted to really understand the material. I remember sometimes feeling a bit nervous in answering his questions, because it was clear that a "hand-waving" explanation of any topic would not be satisfactory, that he would see right through any attempt to "fake it." More than anything, I see that characteristic as the best predictor of his future success. It is easy to imagine him as a formidable opponent in a business deal!

He joined my group that was looking into problems of distributed database systems and wrote a thesis in that area entitled "Performance Evaluation of Concurrency Control Algorithms in Distributed Database Management Systems." I just poked into my files and see that I still have a copy. He seems to have provided some careful qualitative discussion, as well as having written simulations to permit quantitative comparisons. An above average job, for sure!

In the course of working on his thesis, I recall that Tom wondered why there were so many good things going on in universities that were not being applied out in the real world. At that time, there was hardly a decent single-site relational database system available "off the shelf," let alone any support for distributed data. So, yes, I was impressed by him and thought he had a bright future—so when somebody from Oracle phoned up and asked whether I had any smart database students about to graduate, I immediately said, "Yes, Tom Siebel." And the rest, as they say, is history.

Professor Geneva Belford was Tom Siebel's thesis adviser in computer science. She retired in May 2000 after 22 years of service in the department. She came to the university in 1955, received her PhD in mathematics in 1960, and programmed ILLIAC I. As a computer science professor, her research focused on database and distributed systems.



Geneva Belford

Endowment: A legacy that will span generations

Crucial need for chairs, professorships, and fellowships

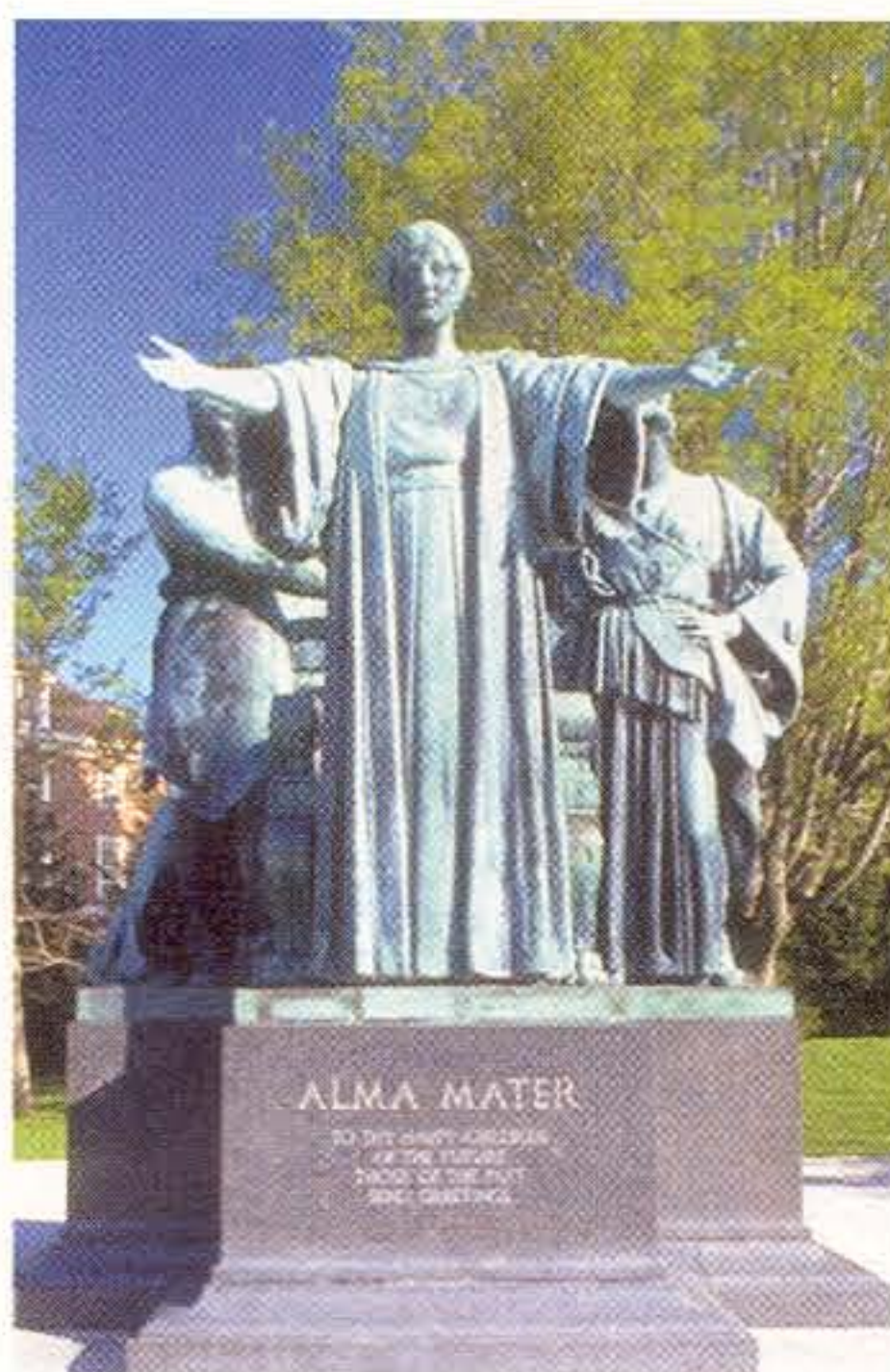
One question we must continually ask ourselves is: How do we retain our position as one of the top computer science departments in the world? A better question would be: How do we surpass our current position to become the number one department in the world? The answer lies not only in our ability to offer the best facilities and computing resources available, which the new building will surely provide, but in our people, which the new building will inspire and attract.

Endowment

One of the strongest mechanisms to attract and retain the most talented of these people is endowed gifts. These are gifts that keep giving as they grow over time—gifts that the department can depend on for sustenance and growth.

An endowed gift is one that generates income in perpetuity. Such gifts are held and managed by the University of Illinois Foundation, an independent non-profit corporation that raises and receives private gifts, administers funds, and manages assets for the university. The Foundation holds endowed funds as principal, managing them to produce earnings to provide designated support. The payout to the department is 4.75% of the endowment, with the remainder reinvested in the principal, less a small management fee. This way an endowed fund will grow faster than inflation, and it will always be there. As it grows, so does the payout to the department. Endowments can be established over a period of several years. When an endowed position is fully funded and earning spendable income, the recipient can be chosen.

The computer science department greatly needs endowed chairs, professorships, and fellowships. With the department expansion, this need has become critical to our recruiting efforts, particularly for faculty. Endowed positions honor both the people they are named for as well as the people who hold the endowed positions. The number of endowed positions speaks to the financial strength of an institution, and endowed chairs and professorships especially lend distinction and strength to the department. There are other endowed funds besides those that support professors and graduate students. Scholarships, lectures, and other departmental activities, programs, or facilities may also be endowed.



Faculty support

The computer science department's highest priority is faculty recruitment and retention, and competition for top faculty members has never been fiercer. We are now faced with the combination of faculty retirements, normal attrition, and the need to increase our faculty from 38 to 71 professors. The ability to offer a chair or professorship to a distinguished faculty candidate is a powerful recruitment tool.

An endowed chair is the highest honor the university can bestow on a faculty member, and for that professor, this designation signifies a consummate honor.

A chair is conferred to recognize outstanding scholarly achievement, and in addition to the prestige of the title, the chaired professor receives a significant increment to his or her annual salary. So in addition to recruitment, it is a powerful tool for faculty retention. Endowed professorships are similar to endowed chairs in design and purpose but at a lower level of funding. Like chairs, named professorships provide recognition of distinguished faculty members.

Funds from the endowment can be used for salary supplement, facilities development, equipment acquisition, graduate student and research associate support, travel, and research expenses. They can also be used to develop new academic courses and research programs that arise from the professor's work.

Currently, we have one chair, the Larry White Chair, endowed by Larry White (BS 75, MS 76) and one profes-

1999–00 Graduate Expenses

Tuition and fees for a 9-month academic year	\$14,386
Tuition and fees for summer	4,551
Stipend at \$1,500/month for 11 months	16,500
<i>Total expenses</i>	<i>\$35,437</i>

sorship, the Faiman-Muroga Professorship, endowed by Doug MacGregor (MS 80).

Student support

One of the reasons faculty members frequently cite for coming to Illinois is the quality of our graduate students. And graduate students are drawn to Illinois by the excellence of the faculty who will serve as mentors and by their fellow graduate students who will become their colleagues and friends. Together, faculty and graduate students create a vital intellectual community and stimulating environment in which to work and to live.

Competition for top graduate students is extremely keen because we compete with our peers at other universities and with industry. Our competitors are the usual suspects: Massachusetts Institute of Technology, Stanford University, University of California at Berkeley, and Carnegie Mellon University. Most applicants visit several campuses and carefully compare the various financial support packages offered by each institution. To attract the very best applicants, we need to offer fellowships. To recognize exceptional students in this way clearly demonstrates how much the department values their scholarly accomplishments and promise as computer scientists.

The payout from an endowed fellowship typically covers a graduate student's stipend. You may establish your own fellowship or you may wish to contribute to one of the several existing funds that we hope to grow to fellowship level. We have two endowed fellowships, the Ray Ozzie fellowship, endowed by Ray Ozzie (BS 81), and the Richard T. Cheng Fellowship, endowed by Richard T. Cheng (MS 69, PhD 71). We seek additional money to build the W. J. Poppelbaum Fund, Daniel Slotnick Fund, C. L. and Jane W. S. Liu Fund, and the Franz Hohn-J. P. Nash Fund into fellowships.

The department strives to reward academic distinction and offset financial hardship through undergraduate scholarships. Undergraduate enrollment is relatively

healthy—despite having the highest admission standards in the university, the computer science department's enrollment continues to rise. Because of our strong commitment to increase diversity in the field of computer science, a high priority is placed particularly on obtaining scholarships directed toward women and underrepresented minority students.

For more information on endowments, contact Judy Tolliver, 217-333-1621, tolliver@uiuc.edu.

Siebel Scholars

The Siebel Scholars Program was established by Tom Siebel at the world's most prestigious business and computer science schools, including University of Illinois, on April 4, 2000. Based on academic merit and leadership qualities, five first-year students from each institution will be honored as Siebel Scholars and receive \$25,000 to help defray tuition costs and fees for the second year of their graduate studies.

Deans from the selected institutions will select the first Siebel Scholars. In addition, an alumni association of all Siebel Scholars will convene at a conference to be hosted annually by one of the participating schools.

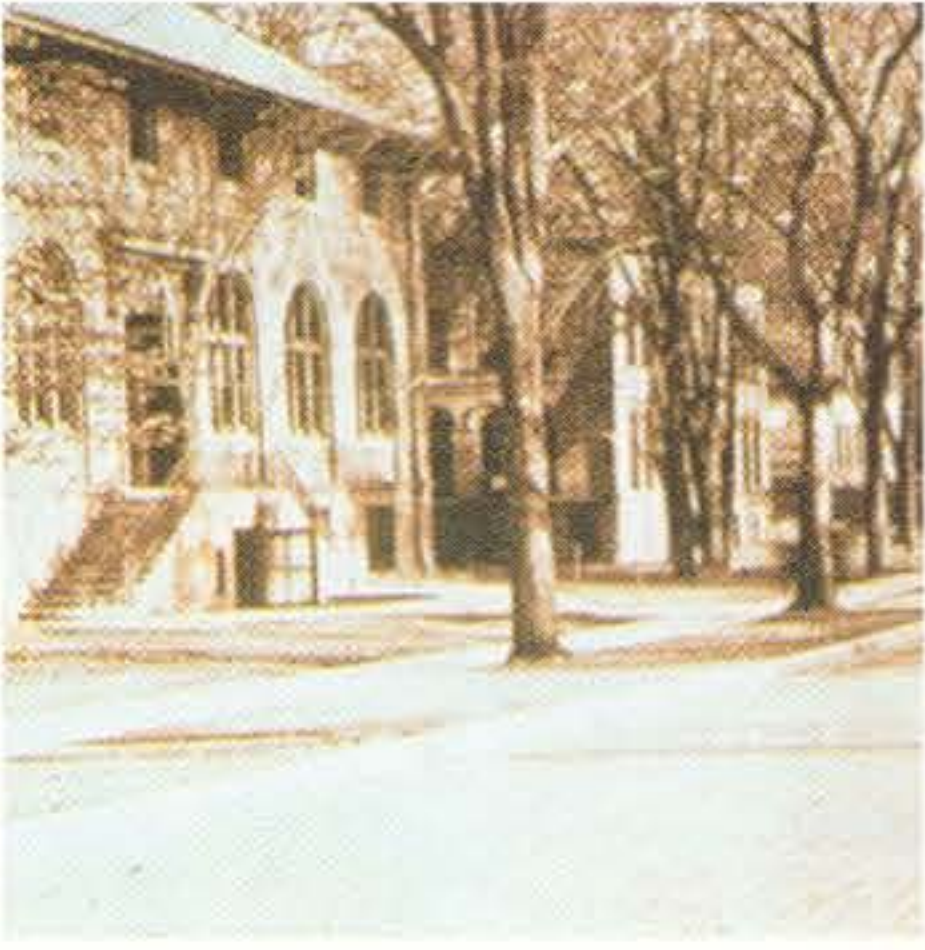
"There exists a serious nationwide shortage of computer science graduates who will be needed to sustain this new industrial revolution, and the University of Illinois is committed to addressing the problem," said COE Dean William Schowalter. "The Siebel Scholars Program is a powerful means of motivating the best and brightest young people to enter the field and to reward those who excel above their peers. We look forward to naming our first class of Siebel Scholars, and we are confident that this visionary program will become the centerpiece of our efforts to identify and cultivate tomorrow's leaders in computer science."

"The graduate programs at these universities have made great contributions to industry and society, both here in Silicon Valley and worldwide," said Tom Siebel. "Siebel Systems wishes to support those efforts on a personal level, and the Siebel Scholars Program is our way of helping develop the talent."

In addition to Illinois, the Siebel Scholars Program has been established at Carnegie Mellon University, Massachusetts Institute of Technology, Stanford University, University of California at Berkeley, Harvard University, Northwestern University, University of Chicago, and University of Pennsylvania. Each institution is receiving a \$2.6 million endowment for the Siebel Scholars program.

1999-00 Undergraduate Expenses

	<i>Resident</i>	<i>Nonresident</i>
Tuition and fees	\$5,130	\$11,946
Room and board	4,962	4,962
Books and supplies	670	670
<i>Total expenses</i>	<i>\$10,762</i>	<i>\$17,578</i>



1920s



1940s



1950s



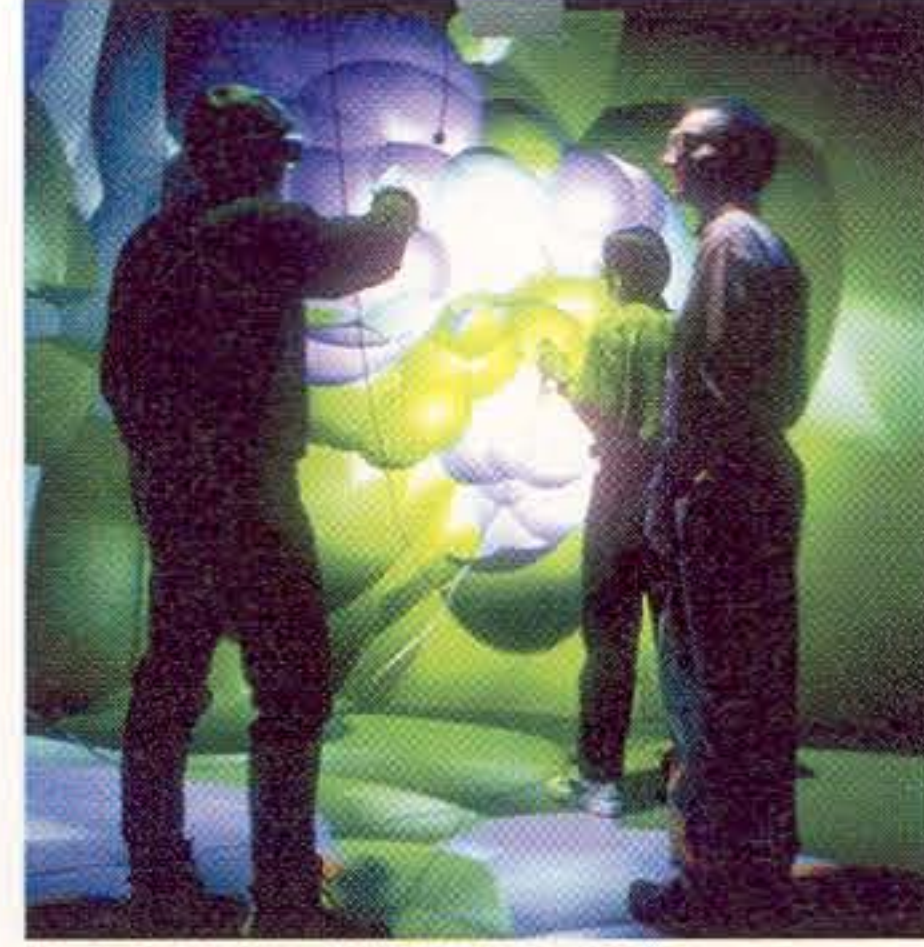
1960s



1970s



1980s



1990s

With your support,
you can help
shape
our future!

2000s



DEPARTMENT OF
COMPUTER SCIENCE

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Urbana, IL 61801

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Card Number _____ Exp. Date _____

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My company, _____,
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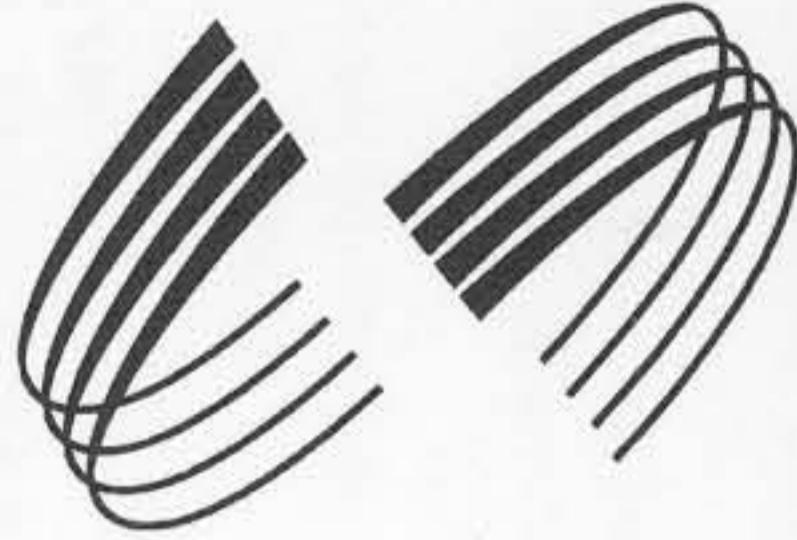
Please return this card with your gift to: University of Illinois Foundation

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Thank you!

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Department of
Computer Science

You can play an important role in the renaissance of the Computer Science Department at the University of Illinois.

Here's how:

- Make a cash gift to the department using this form.
- Make a gift of securities (and receive tax advantages)
- Help your company make a gift—we need infrastructure and equipment!
- Establish an endowment for faculty or students

For more information, contact Judy Tolliver, coordinator of alumni relations and development, Department of Computer Science, 217-333-1621, tolliver@uiuc.edu.

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I'd like to make a major gift. Please have someone contact me.

This gift is from: _____

This is a joint gift. Spouse's name: _____

Here is my gift of _____

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|--|---|
| <input type="checkbox"/> Chair | <input type="checkbox"/> Graduate fellowship |
| <input type="checkbox"/> Professorship | <input type="checkbox"/> Undergraduate scholarship |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> Computer Science general fund (unrestricted) |

Your gift is tax deductible as allowed by law.

Continue on other side . . .