Some things change ~
Some things don't . . .
Alumni Visits to Cal Poly

One of the most valuable contributions you can make to the Computer Science Department at Cal Poly is to share your insight and experience with current students. Faculty and students alike appreciate the effort you put forth to visit the department and address classes and student organizations. We spoke with several recent visitors about their impressions of our current students, the industry, and how it has changed since they were students here. Here's what they said.

Eddi Looy is an investment representative with Protective Financial. She graduated from Cal Poly in 1974 with a bachelors degree in Statistics, when it was part of the Computer Science Department. Since then, “The whole field has changed!” she explains.

“Our only labs were for hand-held calculators.”

She recalls learning assembly language and the punch cards used for programming, which did not allow for the quick feedback students are so used to today at Cal Poly.

Sean Albright is a Senior Associate at Cambridge Technology Partners. He is...
Honor Roll
of Donors

Your Contributions Make a Significant Difference to Us!

We thank the following contributors to the Computer Science Department. One hundred percent of this money goes to the department and is used to benefit both the students and faculty professional development, which indirectly benefits the students.

Delta Society ($1,000 or More)

Alias/Wavefront, Inc.
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Prototyping & Development Heuristics, Inc.
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Kimberly Rogers
Sherry Sarmiento
Steven & Teri Sartain

Students & Faculty Benefit From Alumni Contributions

Your personal and corporate gifts continue to have an enormous impact on the Computer Science programs at Cal Poly, as funds from the state continue to come short of full funding of the programs’ needs. With your support, we have funded hardware and software purchases, student awards, faculty travel and professional development, student employment in our laboratories and in support of faculty research, and student events such as the annual banquet and New Student Open House. We thank you, knowing that without your support, the excellence of our programs would be diminished.

For those of you who contribute in general support of the Computer Science Department, we anticipate spending $60,000 to replace our aging department file servers (phoenix and galaxy) and are looking to match the anonymous endowment for Ph.D. support (see page 5) with a similar program for Computer Science master’s students.

Many of you have expressed interest in supporting specific needs. We currently have separate funds for the following purposes. In each case, every dollar you donate goes directly to the stated purpose.

Computer Science Scholarships:
This scholarship program was established to honor donations from individuals who wish to award excellence in Computer Science. Typically, department scholarship programs receive gifts such as alumni donations and memorials which are not expected to reach endowment levels. Funding will vary from year to year and individual donations may be combined to make any given award.
Donations may be made to the fund at any time during the year. The Computer Science Awards Committee, made up of Computer Science faculty, selects the recipients.

Computer Science Student System Administration:
This fund was established to support student system administrators in the Computer Systems Laboratory. These students, who have called themselves Lab Rats for as long as anyone around here remembers, are essential to the operation of the nearly $3 million of computer equipment in the department. This fund augments state funding used.

Computer Science Professional Development:
This fund supports professional development of the faculty and professional staff. It is primarily used for travel to conferences and is used to supplement limited state funding in this area.

Erika Rogers, Associate Professor, uses the Artificial Intelligence Laboratory to have students apply AI techniques and methods to develop software, in keeping with the Cal Poly philosophy of learn-by-doing. Funding is being sought to build a facility with sufficient resources to run the complex software used in AI.
Alumni Enjoy Mini-Reunion in Santa Clara

Computer Science alumni from the late 1970s and early 1980s gathered at Pedro’s in Santa Clara for a small reunion. Alums Kathy DeMartini and Janet Morris brought the group together to catch up on news and find out what everyone is doing.

Bay Area alumni who attended included Kathy DeMartini (PDH Inc.), Louis DeMartini (Tasso Group Inc.), Gary Bloom (Oracle), Joe Pasqua (Adobe), Janet Morris (Hewlett-Packard), Farzad Nazem (Yahoo), Mark Swanson (Network General), and Kim Rogers (Hewlett-Packard). Professors Jim Beug, Chris Buckalew and Emile Attala represented Cal Poly, along with College of Engineering’s Director of Development, Linda Kristenson.

The group exchanged contact information and came away determined not to wait so long before getting together again.

If you are interested in hosting or helping with an alumni gathering, informal or formal, large or small, please let us know. We would be delighted to assist you and faculty would be honored to participate in your event.

Web Page Helps CSC Alumni Keep in Touch

Nearly 250 Computer Science alumni have listed themselves on the alumni web page www.csc.calpoly.edu/~alum, or go through the Computer Science web page at www.csc.calpoly.edu. If you haven’t had a chance to check it out, take a few minutes to do so. Enter your own data, find out where your old classmates are working, send them email! Listings can be accessed by year of graduation or by last name.

If you are already listed and have changed jobs, be sure to update your information. If you have any suggestions for increasing the usefulness of this page, please let Professor Dan Stearns (MSCS 1974) know.

Joshua Lober, Class of ‘94, is one of many alumni who have linked their personal or business web-site to the CSC Alumni web page.

Tandem Computers, Inc.
Transarc Corporation
Donald Van Patten
Wind River Systems, Inc.
Richard Yonash
3Com Corporation

Dean’s Associates
($500 to $999)

Damon Antos
Joseph Bayless
William Bray
Lawrence & Victoria Browne
Barry & Jeannie Bruins
Steven DeJarnett
Lynda Elliott
Donald & Marguerite Erickson
Gregory & Nancy Hobbs
Eric Johnson
Gail Kirschenmann
Rolf & Janelle Klenk
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Kelly McClure
John McKiernan
Bruce Mengler
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College Partners
($250 to $499)

Apple Computer, Inc.
Susan Armstrong
Thomas & Rosa Austin
Brian Baer
Bellcore
John Bettendorf
Stacey Blaschke
Rion Cassidy
Cisco Systems, Inc.
Kim Cousins
Richard & Serene Dong
Michael Ernst
Richard & Colette Farabaugh
Michael & Terrie Gallagher
Several Cal Poly students have won national recognition from ACM for their work in Java.

Computer Science undergrads Brian Kurotsuchi and S. Fouzi Husaini were published in the Winter 1998 issue of ACM Crossroads. Their articles, “The Wonders of Java Object Serialization,” and “Using the Java Native Interface,” were included in the Java-themed issue.

Cal Poly Computer Science graduate student, Ken Wingerden, received second place honors in the ACM/IBM “1997 Quest for Java” worldwide development contest. The contest for ACM student members was created to motivate and assist the next generation of computer professionals in their understanding of business and educational benefits of Java.

Mr. Wingerden's submission was “Remote Java Draw,” an applet and application for a collaborative drawing tool for the Internet. It was the test applet for his master's thesis. All “Quest for Java” applets and applications must solve real-world problems or enable typical businesses or transactions.

According to Lillian Israel, ACM director of membership and ACM coordinator of “Quest for Java”, “The scope of the Java projects we received, and the innovation and creativity they exhibit, reveal a great enthusiasm for Java among university students around the world. The high quality of the top winning projects proves that Java has a strong future - its uses are limited only by the imagination.”

Java is currently being used at Cal Poly in CSC 435, Introduction to Object Oriented Design Using GUIs.

The undergraduate program in computer science has received continuing accreditation by the Computer Science Accreditation Commission of the Computing Sciences Accreditation Board, a specialized accrediting body recognized by the Council for Higher Education Accreditation and the Association of Specialized and Professional Accreditors.

Accreditation is based on satisfying minimum educational criteria. Cal Poly’s computer science program was first accredited in 1986 and is one of only 13 accredited computer science programs in the California State University system. Other accredited institutions include such programs as University of California programs at Berkeley, Davis, Santa Barbara and Los Angeles, United States Air Force Academy and Massachusetts Institute of Technology. A complete list of accredited computer science programs can be found at www.acm.org/~csab.
An anonymous donor who took Computer Science classes at Cal Poly 15 years ago has made a bequest which will enable selected Cal Poly students to study for doctoral degrees in computer science. The bequest of $1 million includes an immediate endowment of $600,000, the income from which will provide fellowships to several students each year. The first awards are anticipated in Fall 1998.

According to the wishes of the donor, recipients will be determined by a committee of professors from Cal Poly's Computer Science Department. Because Cal Poly offers no Ph.D. programs, recipients will use the funds to study at other universities, or come as Ph.D. candidates to perform applied research at Cal Poly.

The nationwide shortage of doctoral students in computer science is caused in part by the robust job market for undergraduate students. When students weigh the time and cost of graduate school against their immediate earning potential, there is a tremendous disincentive. These fellowships will offset the disincentive.

The Computer Science Department also seeks support for a matching endowment for students entering the master's program in computer science at Cal Poly. Please contact Jim Beug if you are aware of a potential source of funds or would be willing to help with the effort.

Thinking of returning to school to earn a Ph.D. in computer science? If so, opportunity knocks.

The Cal Poly Computer Science Department has received a generous endowment bequest to be used in support of Ph.D. study in Computer Science. Proceeds from the funds, given by an anonymous donor, will provide a fellowship for a Cal Poly graduate to pursue a Ph.D. at an accredited university of his/her choice. For further information, contact the CSC Graduate Committee, Computer Science Department, Cal Poly, San Luis Obispo, CA 93407; or send Email to jilbeug@calpoly.edu.
New Hires, Retirements Change the Face of the Faculty

The Computer Science Department is proud to announce the addition of four new faculty, while several retirements have forced us to bid farewell to some favorite faces.

Dr. Lewis Hitchner joined the Computer Science Department faculty in Fall 1996 following three quarters as a visiting lecturer. Dr. Hitchner’s research interests are virtual reality systems and real-time visualization/simulation software, 3D interactive computer graphics, and digital image processing software. He has previously been a faculty member at UC Santa Cruz, a researcher in virtual reality at NASA Ames Research Center, and an employee or consultant for both established and start-up companies.

Dr. Sigurd Meldal came to Cal Poly in Fall 1997 after serving as a Visiting Professor at Stanford University, and Professor and Chair of the Department of Informatics at the University of Bergen (Norway). His research focus is the systematic design and implementation of distributed software architectures. Recently he has turned his attention to the automatic instrumentation of Java-based systems, showing how such instrumentation can identify incorrect system behavior. Dr. Meldal is an editor of the Nordic Journal of Computing and has published one book and more than 60 technical papers.

Dr. Erika Rogers was an Associate Professor at Clark Atlanta University in Georgia before joining the Computer Science Department at Cal Poly.

Some faces stay the same - Professor Elmo Keller goes over a lab assignment in CSC 453, Introduction to Operating Systems, where students gain experience in the modification and maintenance of time-shared operating systems.
Poly in Winter 1998. Her research interests emphasize the use of cognitive science and artificial intelligence techniques for developing cooperative intelligent computer assistants for visual problem-solving. She worked in industry for several years and brought with her to Cal Poly several collaborative funded projects, including the prestigious National Science Foundation POWRE (Professional Opportunities for Women in Research and Education) Program grant.

Dr. Chris Scheiman received a joint appointment with the Computer Science Department and the Computer Engineering Program in Fall 1996. His current area of interest is the fast communication of mechanisms needed to connect personal computers or workstations together to form a parallel platform. He recently completed a post-doctoral research assignment at University of California, Santa Barbara.

Retirements have included some of the most senior members of the department. Dr. Daniel Stubbs is pursuing his interest in C/C++ in his retirement, effective Fall 1997. Dr. Emile Attala retired in Spring 1997 and will devote his time and energy to travel as well as Year 2000 consulting assignments. Dr. S. Ron Oliver has fulfilled one of his lifetime goals by retiring from the sunny Central Coast to the mountains of Colorado in Summer 1997. He and his wife, Joy, are constructing an “earthship”, an alternative earth-friendly human habitat!

Dr. Patrick Wheatley entered a faculty early retirement program in Spring 1998, which will allow him to continue his contributions to the department on a half-time basis.

In related news, Reino Hannula has moved from the San Luis Obispo area to San Diego and Dr. Roger Camp and his family have moved to Austin, Texas.

In support of life-long learning and our ongoing commitment to our graduates, the department would like to help organize alumni get-togethers in your neighborhood. Initially this would be to provide a chance for Poly CSC alums to network with one another and to learn what members of the department are currently doing. We would also like to provide support for ongoing alumni learning in the form of industry seminars in your area, or in San Luis Obispo.

In the next year I hope to pay visits to the Pacific Northwest, Denver, Chicago, and the Research Triangle Park area. If you would be interested in attending such events, or better yet, would like to get involved in organizing alumni events, please contact me at: jibeug@calpoly.edu.

Another way to stay in touch is to visit our web site at www/csc/calpoly.edu, and follow its link to our alumni page.

Keeping in Touch
A Message From Department Chair, Dr. James Beug
The last year has seen more changes in the Computer Graphics Laboratory. It has now become the most powerful workstation lab on the Cal Poly campus with the generosity of Silicon Graphics and others. We now have 14 Indys, each with 96M of memory, several with R5K processors, and two with Indy Video boards, plus the Presenter projection panel used for class demos. Additionally, Rhythm & Hues has donated a large SGI file server for the Computer Graphics Lab. The full Alias/Wavefront suite has also been installed on several of the SGIs.

Silicon Graphics has been very generous to the College of Engineering, donating more than $200,000 of equipment in recent years. We need to continue to update this equipment, and to that end we would like to know how many of our graduates work at SGI. I would personally appreciate it if you could drop me a line via Email to say hi; also, I can add to my list of people to see when I visit SGI! My Email is buckalew@calpoly.edu.

On a related note, the Computer Science Department continues to expand its placement of graduates in animation production studios. At last count, there are two at Industrial Light & Magic, three at Disney Feature Animation, one at Digital Domain, one at Sony Imageworks, one at Pacific Data Images, and one at Motion Factory. Students have also worked at Rhythm & Hues (hence the donation mentioned above), Metrolight Studios, Boss, and Warner. I watch movie credits much more closely than I used to, and I frequently see the names of our grads in the special effects sections!

Although many graphics grads aspire to animation production, others are interested in game development, scientific visualization, Windows app development, desktop publishing, or operating systems support. I meet many of you at SIGGRAPH each year. If you’re doing work in computer graphics please let me know! Our current students would be interested in knowing what sorts of jobs our grads are doing, and we always like to arrange for grads to come and give talks about their experiences.

Finally, one of the graphics students (now graduated and working for Pacific Data Images as an assistant effects animator) received special recognition last Spring Quarter: Scott Peterson took first place in the CSU Student Research Competition with his senior project implementation of soft objects (bloppy models, in the jargon),
Microsoft Donation Funds NT Access

Thanks in part to the outstanding job performance of our alumni at Microsoft Corporation, the Computer Science Department was the recipient of a $55,000 cash gift from Microsoft to provide computer science students and faculty access to Windows NT based computers. Under the direction of Dr. Laurian Chirica, the funds were used to purchase 20 workstations and related technology.

Microsoft followed up their gift with the donation of approximately $54,000 of software. The lab opened Fall 1997.

A server for the laboratory was purchased with a portion of a National Science Foundation grant and is used as a file, database and Web server. It can be accessed from faculty offices, the new lab, and other department facilities.

The new lab supports the database courses as well as the core curriculum in Computer Science, which is currently based on the C++ language.

According to the Microsoft recruiter, Cal Poly Computer Science alumni at Microsoft include: Paul David, Scott Senkeresty, Chris Ambler, Cy Cedar, Gwenn Krossa-Friesen, Tim Crooks, Eric Stenson, Doron Holan, Malcaam Haar, Mikey Wetzel, Ming Hsuing-Chou, Matthew Wetmore, Robert Paplin, David Perdue, Michele Gamboa and Joel Wiljanen. (If you work for Microsoft and you’re not on this list, please let us know where you’re working and what you’re doing.)

No Surprise: CSC Grads in High Demand

According to the latest Cal Poly Employment Status Report, computer science graduates are part of the upward trend in full-time employment for the university. In addition to the overall trend, the department has seen a sharp increase in the number of recruiters seeking our graduates and in the number and caliber of job offers per student. Graduates from our department are among the highest paid engineers, as well as in the top salary rankings for Cal Poly as a whole.

According to the latest “Graduate Status Report” from Career Services at Cal Poly, the median monthly starting salary for Computer Science graduates is $3,750, with amounts ranging from $2,080 to $4400. [Figures include part-time positions.]

Job titles include Software Engineer, System Administrator, Programmer, Assistant Effects Animator and Network Support. Major employers include Hewlett-Packard, IBM, Lockheed Martin and Sun Microsystems. Most graduates continue to live in California, with relatively few leaving the state or continuing to graduate school. For the first time, one-third of those responding to the survey took positions in the San Luis Obispo area, reflecting the increase of professional computer science positions in the community.
Alums, cont.

Mr. Albright earned a bachelor’s degree from Cal Poly’s Computer Science Department in 1994. He has conducted several interviews at Cal Poly and has a high regard for the students’ abilities. He believes that the interview process for graduating students has remained fairly consistent since he graduated, but says that the students show an increased awareness and experience of Web technology. Cambridge Technology has quite a few Cal Poly alums on staff in the Bay Area and Southern California.

Steve DeJarnett is a Lead Software Engineer with Philips Multimedia Center. He has recently been experimenting with new ideas for consumer services on the Web. His first project is called PlanetSearch and can be found at www.planetsearch.com. Mr. DeJarnett has also been working on a Web-enabled data warehouse/salesforce automation system.

“... students show an increased awareness of Web technology.”

“... the Rat’s Nest has better equipment.”

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Steve DeJarnett is a Lead Software Engineer with Philips Multimedia Center. He has recently been experimenting with new ideas for consumer services on the Web. His first project is called PlanetSearch and can be found at www.planetsearch.com. Mr. DeJarnett graduated from Cal Poly in 1989. Since then, he says, there are at least a half dozen new projects to achieve significant reductions in HP support costs. Ms. Morris graduated from Cal Poly with a B.S. in computer science in 1982. During her Cal Poly visit, her impression was that the environment was very similar to the time when she was a student: “same positive learning environment, accessibility of professors, quality of classes and other resources, excellent student participation and drive, variety of extracurricular activities, competent and helpful office staff, commitment to students, etc.” However, Ms. Morris did notice some significant changes to the campus, including new buildings and centers, a lower percentage of female students in the senior seminar class, and that the students she spoke to seemed interested in a broader range of topics.

Janet Morris is a Knowledge Consultant for the Software Services Division of Hewlett-Packard. She is currently investigating knowledge system usage by HP’s Support Engineers to propose content projects to achieve significant reductions in HP support costs.
phone call to the support center. Ms. Burt graduated from Cal Poly in 1990 with a B.S. in Electronic Engineering. “The Computer Engineering program was just getting started as I graduated, so it is great to see it really going strong.” Ms. Burt notes that “Cal Poly is still a beautiful campus, with lots of opportunities for the students to learn and grow through both classroom work and extracurricular activities.” She enjoys recruiting at Cal Poly because “the students are very bright, have good technical depth (I am usually looking for computer science and engineering students), and are very personable.” There are quite a few Cal Poly graduates at SGI, with more sure to come due to recent job offers.

David Intersimone is currently Director of Developer Relations for Inprise Corporation. Mr. Intersimone graduated from Cal Poly with a BS in Computer Science in 1973. He says that the main difference he notices today is that Cal Poly has so much more computing equipment! “In 1969 and 1970, we used punch cards. With personal computers, graphics workstations, computer labs, and multimedia, students today have a wealth of hardware and software to help in the learning of computer science.” However, Mr. Intersimone stresses the important similarities which are a continuing part of the Cal Poly tradition. “The spirit on the Cal Poly campus is still great. The surroundings (trees, hills, air, beach, town) are very conducive to learning, and the professors are top notch.”

“The spirit on the Cal Poly campus is still great.”

The gardens near the faculty courtyards remain a popular gathering place.

Sarah Quady
John Rasmussen
James Reynolds
Kathy Reynolds
Wayne & Pamela Rhoten
Richard Rolston
Richard & Anne Rose
Brian & Janet Ross
Ronald Ross
Earl & Susan Arado Ruby
Morgan Sagen
Monica Sanford
Harvey & Gayle Sarner
Teresa Schoeck
Mark Shah
Nancy Shaw
Richard & Denise Shawlee
Peter Signorotti
Silicon Graphics
Terri & Beth Sipantzi
Andrew & Suzanne Smith
Joanne Snyder
Thomas & Gerda Sparks
David Staas
Bradd & Catherine Statley
Kurt Staufenberg
Philip Strahl
Sharon Takata
Bernard Tatera
Randolph Taylor
James Tennies
Bradlee Terry
Clyde Trumbore Jr.
Din-I Tsai
Edward & Phyllis VanSanbeek
David & Kimberly Venancio
Phong Khac Vo
Kim Vorath
Thomas Wang
W. Michael & Randal Wilder
Dennis Wittman
Arnold Wong
Rose Anne Yanes
Wayne Yurtin

Every effort has been made to ensure the completeness and accuracy of this listing of contributions made through May 1998. Regrettably, mistakes do sometimes occur. If you find an error, please do not hesitate to contact the Computer Science Department, 805.756.2824.
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<td>Where are you and what are you doing now? Please include current job title and employer.</td>
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<td>From Your perspective, what should the Cal Poly Computer Science Department be doing today to prepare its graduates for their futures?</td>
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**Cal Poly**
San Luis Obispo, CA 93407

Computer Science Department
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