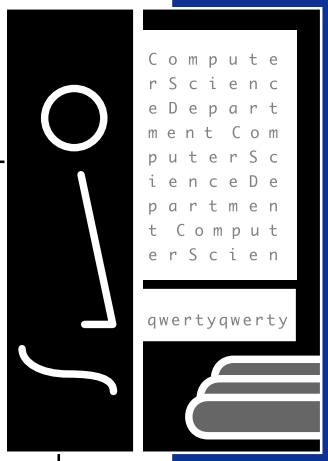
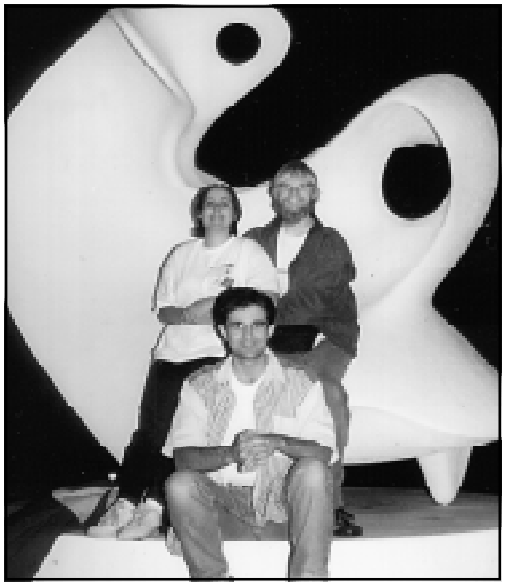
winter 1999

@csc.calpoly.edu



CSC Team Places Second in Tough Regional Competition

The Cal Poly Gold programming team beat out 44 other collegiate teams to place second in the Association for Computing Machinery (ACM) Southern California Regional Programming Contest on Nov. 14, 1998. The team, consisting of computer science graduate student **Bob Mathews**, computer science undergraduate **Vania Maldonado**, and physics undergraduate **Ray Lee**, will advance to the World Finals of the ACM International Collegiate Programming Contest held in Eindhoven, The Netherlands, next April.



Cal Poly Gold Team,
Vania Maldonado, Bob Mathews, Ray Lee
(clockwise from top left)

A Remarkable Contest

In an amazing display of speed and accuracy, the Cal Poly Gold team finished the problem set almost a full hour before the contest ended. It's only the second time in the history of the region that all six problems have been completed during the contest. Although the top three teams completed all problems during the contest, the Cal Poly Gold team was the only team to do so with no penalties. Cal Poly Gold closely trailed Harvey Mudd Team 42 by merely 15

Continued page 3

a newsletter of the computer science department cal poly san luis obispo

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.

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Computing Abroad: The London Study Program

Last spring, Professor **Daniel Stearns** (MS CSC 1974) and eight Computer Science majors joined the London Study program for a quarter abroad. Prof. Stearns taught CSC 302, Computer Applications and their Social and Cultural Implications in the United Kingdom. Focused on society's impulse to computerize human processes for efficiency, the course covered technological issues in the British media and related public policy issues. Class discussions ranged from the British wariness of intrusive technology to the landmark peace agreement for Northern Ireland.

After a seven-day orientation tour of England, students used London as a laboratory. The Cal Poly contingent visited Parliament, Westchester Cathedral, the reconstructed Shakespeare Globe Theater, the English National Opera, and West End theaters. In addition to these expected sightseeing spots, students in Prof. Stearns' class toured the control center of the famous Underground Tube subway, explored the National Science museum, and visited Scotland Yard.

The study abroad program enhances informal contact between faculty and students, especially with a pub conveniently located below the classrooms in the University of London's Student Union. No wonder Computer Science undergraduate **Ryan Stubblefield** exclaims: "Europe was a torrent of artistic experience and inspiration. I was on a passionate high the whole time." For Computer Science major **Annie Beug**, " All the history, literature, and music classes I'd had came together in one city. Every building told the story of London." Computer Engineering major **Scott Feldstein** will long remember the "cultural sophistication," as well as the noon gatherings in local taverns.

Expect to see Prof. Stearns teaching abroad again. And don't be surprised if some Computer Science majors translate their London Study quarter into computing careers that require frequent international travel.

minutes' difference in time score and trounced the third place Cal Tech team by more than two hours. Rounding out the top six were teams from UCLA, UC Irvine, and UC San Diego. The Cal Poly Green team also made a good showing, solving two problems to take twelfth place. Out of the 46 teams that competed, only 29 placed on the scoreboard by solving at least one problem.

Six Problems, Five Hours, One Computer

The contest pits teams of three people from universities in southern California, southern Nevada, and Hawaii against each other to solve six tough programming problems within five hours on a single computer. The teams' solutions are judged on whether the solution produces the correct output in the specified format within a 180-second run-time limit. Incorrect submissions are rejected with only minimal error messages, and incur a penalty if the problem is eventually solved. Teams are given a "time score", which equals the summation of the time in seconds from the beginning of the contest to the submission of each correct solution, plus 1200 seconds (20 minutes) for each penalty. The team that finishes the most problems wins; lowest time score determines rank among teams that finish the same number of problems.

On to the Finals

The Cal Poly Gold team will compete on April 12 against 56 other teams from around the world to determine the 1999 world champions. The team will be training steadily over the next four months in order to represent Cal Poly to the very best of their ability. As Ray Lee jokes, "All that's left is to play a quick game of *paper rock scissors* to see who gets stuck learning the computational geometry algorithms."

Coach Kathleen Luce *chats with* Jeff Richardson *at recent alum event*

Cal Poly Green Team, John Bellardo, Jeff Mintz, Joel Fish *(left to right)*

Thanks to Volunteer Coach

Special thanks go to the team's coach **Kathleen Luce**, an Operating Systems Analyst with Information Technology Services on campus. Ms. Luce brought valuable insight, since she competed on the Cal Poly team at the 1993 and 1994 World Finals during her student days. Ms. Luce describes, "I felt excited to participate again in something that meant so much to me as a student." She volunteered her time to lead practice sessions and simulated contests that lasted up to five hours with progressively difficult problems.

Want to help the programming team?

The team is seeking volunteers to help create problems, write test data, and do judging for the numerous mock contests that will be an integral part of its preparations for the internationals. For examples of problem sets, see the problem archives for past contests at the ACM web site at acm.baylor.edu/Past/Default.htm. Sponsors are also sought to help cover travel costs for the Netherlands trip. For more information, contact the team coach, Kathleen Luce, at:

Kathleen Luce
Programming Team Advisor
Building 14, Room 114
Cal Poly,
San Luis Obispo, California 93407

Or send email to:
kluce@calpoly.edu

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Sigurd Meldal
J. Bradley & Janet Morris
Ishwar & Ragini Murarka
Lap Yan Ng
Thu-Tam Nguyen
Peter Niemann
Michael Noehren
Michael Okamoto
Richard & Kei Palmer

SLO CSC Alumni Get Reacquainted

In November, about 25 computer science alumni from the San Luis Obispo area gathered for refreshments and conversation in the familiar Computer Systems Lab at Cal Poly. The CSC department is making an effort to do a better job of keeping in touch with alumni, and wanted to provide an opportunity for local alumni to network and get reacquainted with each other and to learn what members of the department are currently doing. Attendees were so enthusiastic about the event that plans are already being made to repeat it next fall.

Guests at the Cal Poly event included: **Margaret Ames**, BS CSC 1997, software engineer, Lockheed Martin Mission Systems; **Steve Chappel**, GIS analyst, BTG; **Marcos Della**, vice president, Cornerstone Consulting; **Mike Ernst**, BS CSC 1993, senior staff engineer, P-Com; **Neal Feaver**, BS CSC 1976, MIS manager, Cal Poly Foundation; **Rick Finnegan**, BS CSC 1985, vice president, Quintron Systems, Inc.; **Matt Harding**, BS CSC 1998, software engineer, Ziatech Corp.; **David Herzog**, BS CSC 1990, information systems manager, County of Ventura Health Care Agency; **Rick Gilligan**, senior software specialist, CASE; **Darrin Gollnick**, BS CSC 1998, network specialist, San Luis Coastal Unified School District; **Ryan Jackson**, BS CSC 1997, applications programmer, Dega Technology; **Ruth Jenkins**, contract programmer, PG&E; **Rich Jolissaint**, BS CSC 1990, independent distributor for Starlight International; **Jason Johnson**, BS CSC 1998, graphics software developer, CADRC; **Greg Junell**, BS CSC 1995, Internet consultant.; **Vicki (Pedersen) Lenich**, BS

Richard Jolissaint and Neal Feaver

Allison Nichols and Josh Lober

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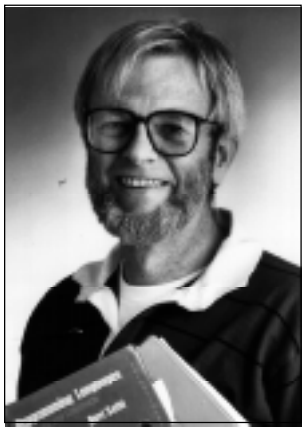

Keeping in Touch

A Message From the Department Chair, Jim Beug

Dear Friends,

The computer science alumni from the San Luis Obispo area met the weekend before Thanksgiving with some of the faculty of the department to renew old acquaintances, to network, and to see what former students and colleagues were doing. We had a very successful afternoon, talking, eating and generally catching up. A link to pictures from the event can be found on the computer science web page www.csc.calpoly.edu.

We would like to offer events like this more often renew old acquaintances, make new friends to let everyone see how Cal Poly alums are doing. In order to do more of this, we need two things.

First, let your colleagues at work know that you are a Cal Poly computer science alum. We have been pleased to learn of a number of your fellow alums with significant jobs both in the computer industry and elsewhere. For instance, of those of you who graduated in the early 80's, **Gary Bloom** is executive vice president of Oracle Corporation's Systems Product Division.

Second, we need your help in finding lost fellow alums, in deciding what sort of events to have, and in organizing and planning events. If you know of "lost" alums from the Computer Science Department, or would like to help in organizing an event in your area, please let me know at jlbeug@csc.calpoly.edu.

SIGGRAPH ALUM EVENT

The Computer Science Department is interested in having an alumni reunion in the Los Angeles area in conjunction with SIGGRAPH '99 the second week of August.

Professors Chris Buckalew, Chuck Dana and Lew Hitchner have regularly attended SIGGRAPH in the past, and others may join them as well.

If you are interested in attending or helping to plan such an event, please contact Ellen Stier via Email at estier@calpoly.edu or by telephone at 805/756-5525.

Chuck Dana and Ruth Jenkins
(foreground)

CSC 1982, senior systems programmer/consultant, Trident Services; **Steve Mead**, software engineer, Lober & Walsh Engineering; **Brett Moser**, BS CPE 1997, hardware/software engineer, Lober & Walsh Engineering; **Jeff Richardson**, BS CSC 1984, information systems manager, JBL Scientific; **Steven Roberts**, BS CSC 1997, software engineer, Applied Technologies Associates, Inc.; **Andy Smith**, BS CSC 1986, technical manager, AT&T Labs; **Dave Spencer**, BS CSC 1997, software engineer, Xing Technology; **James Thompson**, MS CSC 1994, senior software engineer, L-3 Communication; **Kent Worker**, BS CSC 1973, principle software engineer, L-3 Communications.

Mei-ling Liu and Matt Hardy

Cheryl Palmer
Luis Pascual Jr.
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Raymond Potter
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Ryan Robinett
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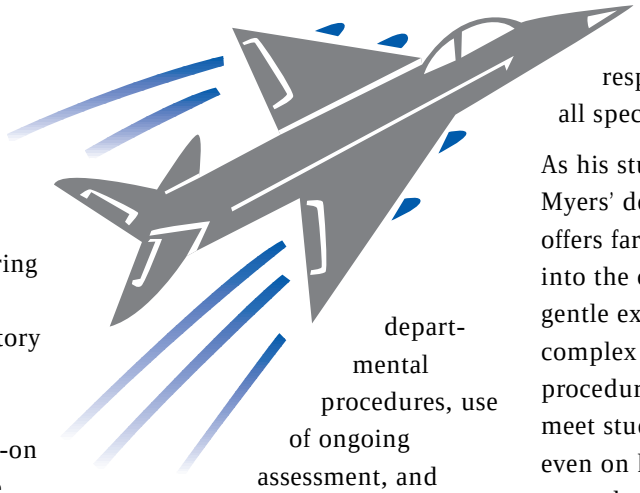
Richard & Serene Dong
David Downey
Catherine Eusebio
Brandon Fields
Raymond Finch
Jill Foley
John Foxcroft
Cindy Fratto
Pepito Galicinao
Darrin Gollnick
Brian Hackley

Taking the Cal Poly Vision on the Road

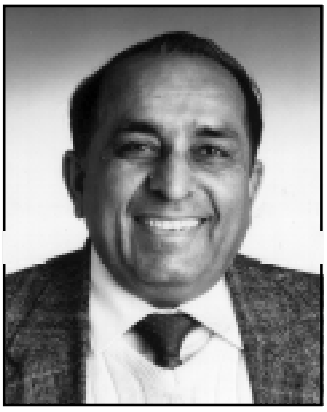
To the Air Force Academy and Back

During the past academic year, **Dr. Len Myers** brought more than three decades of teaching experience to the Air Force Academy in Colorado Springs. In addition to instructional duties as a visiting professor, he served as a general consultant to the Computer Science Department at the Academy. From developing a minor degree program to reviewing the new computer engineering curriculum and assessing introductory courses, Dr. Myers shared Cal Poly's approach to hands-on education with the faculty and cadets.

Dr. Myers returned to Cal Poly in the Fall of 1998, full of ideas and prepared to apply teaching methods explored at the Academy. He was particularly impressed by the sense of community, clarity of departmental procedures, use of ongoing assessment, and collaboration among instructors of course sections. For example, the Air Force Academy gives an identical exam for all sections of an introductory computer course, with faculty reviewing each question for relevance to curriculum goals and technical skills. In addition, daily lesson plans structure each section and emphasize the students' responsibility to learn all specified material.



As his students know, Dr. Myers' dedication to teaching offers far more than insight into the curriculum. His gentle explanations of complex programming procedures, his willingness to meet students for tutoring even on holidays, and his warmth during office hours provide a model of excellence for faculty anywhere.



In Memoriam

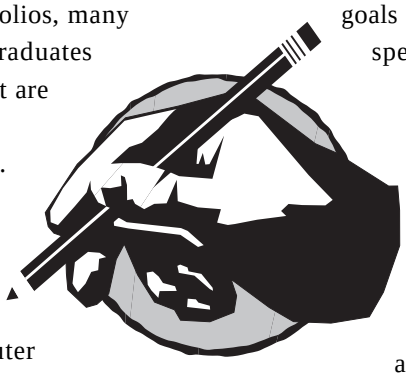
Sham S. Luthra

The Computer Science Department is saddened by the loss of Dr. Sham S. Luthra, whose Cal Poly career spanned twenty-five years. With a Ph.D. in Operations Research from the University of Minnesota, Professor Luthra's area of expertise involved simulation, both discrete and continuous, using optimization models and scientific programming. His most recent research focused on optimized water systems and models for interpreting LandSat data.

Many alumni will remember his distinguished career of teaching and research, particularly his emphasis on varied mathematics in computing. We are grateful for Dr. Luthra's many years of service, and we will miss his presence on campus.

How to Make a Gift Without Writing a Check

Since your Cal Poly degree has proven to be a wise career investment, consider returning part of that investment to your *alma mater*. With the stock market fueling alumni portfolios, many Computer Science graduates now hold stocks that are significantly appreciated in value. Not only do stock gifts enrich our ability to educate the next generation of computer scientists, but they also result in significant advantages for the donor.



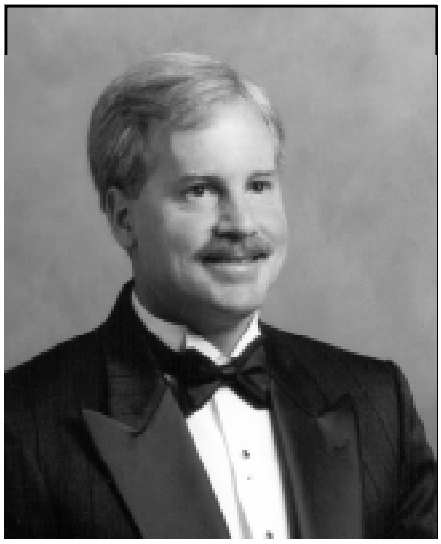
Stock can be transferred to Cal Poly as an outright gift or as part of a charitable life income gift plan. Many alumni appreciate the ease of making a generous annual contribution without even writing a check. You can let your investment savvy advance the Computer Science Department's goals or consider creating a special scholarship fund.

Benefits of a charitable life income gift include increased income based on the full market value of the stock, a substantial charitable income tax deduction as allowed by law, and avoidance or reduction of capital gains taxes. But most importantly, your stock gift will provide an invaluable investment in the future of high-tech education.

To discuss stock gifts and other planned giving options, please contact Linda Kristenson, Director of Development for the College of Engineering, at lkristen@calpoly.edu or 805-756-6400. You may also call the Office of Planned Giving and Endowments directly at 805-756-7125.

A Remembrance that Lives On:

The Brad E. Yackle Scholarship Fund in Computer Science



From early honors as an Eagle Scout to building a dune buggy from a secondhand Volkswagen and completing an impressive senior project on the "Simulation of a Mini Digital Computer," alumnus Brad Yackle represented the essence of Cal Poly's *learn by doing* philosophy. We are sorry to report that Mr. Yackle passed away in October of 1998.

After graduating with a Computer Science degree in 1974, Mr. Yackle earned his Masters in Electrical Engineering from the University of California, Santa Barbara and began his long career with Hewlett-Packard. Although first diagnosed with a brain tumor in 1984, he maintained a positive outlook, continued in product development at HP, and devoted himself to his wife Dotty and his two children.

To celebrate Mr. Yackle's life, his family has established the Brad E. Yackle Scholarship Fund in Computer Science. Classmates are invited to contribute to the Yackle Fund so that future students can benefit from Brad's legacy.

Thomas & Jane Hanson
Mark Harlan
Chang Hu
Intel Corporation
Douglas Ito
Mitchell Kawatachi
John Korpal
Harry & Charleen Kurotsuchi
Kenneth Lambert
Paul LaFranchi
Timothy Lee
Christopher Lien
Logos Systems International
Gail Lohse
LAM Research Corporation
Michael Maddock
Randolph Marsey
Frederick & Theresa Marshall
Paul & Allison Masi
Daniel & Kathleen Moczarny
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Dennis Murashige
Marco & Susan Murgia
Mike & Nori Naylor
Brett Nelson
Victoria Nier
Kuldip Oberoi
Ocean Path, Incorporated
David Orth
Michael Ransom
Morgen Sagen
Leslie Sandiland
StorageTek Foundation
Leonard & Monica Teyssier
Dorothy Tillman
Ching-Yu Tsai
John Turner
Edward & Phyllis VanSambeek
Helen Williams
Dennis Wittman
Sheri Wright

Every effort has been made to ensure the completeness and accuracy of this listing of contributions made from June 1998 through November 1998. Regrettably, mistakes do sometimes occur. If you find an error, please do not hesitate to contact the Computer Science Department, 805/756-2824.

Adventures in Teaching and Learning

Given the overwhelming pace of technological breakthrough, teaching computer science requires a commitment to covering fundamental concepts while also capturing the excitement of new computing practices and the potential of the latest software. For our faculty, the classroom encompasses research, industry, and collaboration. The three professors profiled here demonstrate that Cal Poly remains at the forefront of computer science instruction.

Exploring Virtual Worlds

From helping NASA design an immersive system for the virtual exploration of Mars to writing a textbook on the hot new programming language Java 3D, Dr. Lew Hitchner brings both virtual and literal developments into the classroom.

> *For students, exposure to new technology and sessions with leading researchers equals better career preparation.*

Until a few years ago, the typical graphics textbook relied on theory and *make-believe* software for purely academic exercises. Dr. Hitchner instead exposes his students to current industrial standards such as OpenGL and innovations such as Java3D. Java3D is an extension of the Java programming language suitable for virtual reality and complex computer graphics. As he explains, "Although still in Beta release, Java 3D is one of the newest and most high-powered products for top graphics performance."

As evidence of Cal Poly's connections with corporate researchers, Dr. Hitchner will co-author his new textbook with Dr. Henry Sowizral, a Senior Staff Engineer at Sun Microsystems and the chief software architect of Java 3D. Last summer, Dr. Hitchner spent one month at Sun's Menlo Park facility, working on the textbook and talking with developers in the lab. This spring, the book will be tested in his 400-level Computer Science course with Dr. Sowizral appearing for guest lectures.

For students, exposure to new technology and sessions with leading researchers equals better career preparation. Dr. Hitchner's courses emphasize this grounding in the practical, despite the experimental work in virtual dimensions. For example, CSC X473, Introduction to Virtual Environment Systems, begins by examining how humans perceive the real world and how computer devices can be used to simulate this reality.

After understanding the principles of perception, students use computer-generated simulation for object and world modeling, scene building, and integration of Virtual Reality software components into a complex system.

As industry increasingly employs virtual prototyping prior to actual manufacturing and as three-dimensional images gain prominence on the World Wide Web, the need for professionals trained in virtual system technologies grows exponentially. With experience using Java 3D, Cal Poly graduates will be fully prepared for such growth opportunities.

Solving Corporate Software Problems

Just completing his first year at Cal Poly after working as a research professor at Stanford University, Dr. Sigurd Meldal admits that undergraduate education is new territory. Perhaps that fresh perspective provides the key to his innovative method for welcoming local companies into the classroom.

The software engineering sequence includes two intensive courses in a six-month span, exposing students to real world practices and problems. Student teams work with outside clients who have a stake in the final product for the course. Dr. Meldal guides his class through the software engineering process, with scheduled milestones, status reports, technical reviews, time constraints, solid deliverables, and high expectations.

Ongoing collaborators include the local firms TrueLink and KSI. TrueLink provides secure Internet access to credit information and financial services for mortgage companies, real estate agents, banks, credit unions, auto dealerships, financial planners, and related enterprises. Kiosk Software, Inc. (KSI) is a market-driven technology company that develops software and services for interactive, multimedia Internet terminals. Participating companies designate a representative willing to spend one hour per week with the students. Success is obvious as the companies return, asking to participate again.

Lori Fisher, President of KSI, praises Dr. Meldal's teaching approach as "well organized, well structured, and with very positive results." In fact, her company hired student Len Kawamoto as a permanent employee.

Mr. Kawamoto describes the relationship as "mutually beneficial" with companies becoming "more visible" and students witnessing "the software engineering process actually happen with physical projects." But also, he adds, local businesses gain access to "lots of young students, excited about the field, who can bring new insight and approaches to the tasks at hand."

Continued page 10

Computer Science major Bob Jamison *shares this enthusiasm: "Software Engineering was the most useful class that I took during my undergraduate program. Dr. Meldal taught us not only how to work effectively in groups but also how to apply all the knowledge that we learned in our major to solve a real project."*

Computerized Advisor

Excerpt from an Artificial Intelligence project using pattern-matching, developed by graduate students **Ryan Averill** and **Larry Bolef**.

The "Advisor" remembers previous information from the user to generate a customized response to input.

ADVISOR: Hello, welcome to the Cal Poly Graduate Student Advisor service.

USER: When should I find a thesis topic?

ADVISOR You should ideally select a thesis topic during your first quarter in the program

USER: How should I find a thesis advisor?

ADVISOR: Since you're interested in *Computer Architecture*, you should talk to the following professors since they share similar interests: Dr. Beug, Dr. Grimes, Dr. Hsu, and Dr. Sheiman.

USER: Goodbye.

ADVISOR: Goodbye. Thanks!

Students are exposed to internship opportunities, potential future employers, and professional standards. Since Cal Poly's future programmers will work in a variety of industries, learning to communicate with non-computer scientists and to apply technology within new domains is crucial. In addition, students learn effective teamwork, from the equitable distribution of tasks and the defining of responsibilities to the cooperative resolution of conflicts.

These skills characterize both an excellent employee and a top-notch business leader. Don't be surprised if many of Dr. Meldal's students soon return to forge classroom partnerships as the Chief Executive Officers of their own software firms.

Constructing Artificial Intelligence

Whether playing checkers to demonstrate knowledge acquisition or creating a simple Eliza-type program to dialogue with a user, students in Dr. Erika Rogers' artificial intelligence sequence quickly learn the challenges of open-ended problems.

As Dr. Rogers explains, "Students face a level of discomfort when requirements are not fully specified." But assessing knowledge domains, matching patterns, making inferences, and representing information is central to the growing field of artificial intelligence.

After overcoming initial uncertainty, students tackle an ambitious project: creating an intelligent agent that uses automated reasoning to perform a task. To stimulate her students' imagination, Dr. Rogers offers a long list of possible subjects: patient-information assistant, radiation therapy planner, urban "search and rescue" assistant, web-based research agent, knowledge-processing tutor, game playing agent, or *What have I done lately?* desktop assistant. Students are encouraged to explore their own areas of interest, but the professor generously offers her own research into expert systems in the medical domain as a starting point.

This coursework often leads into ambitious senior projects. For example, Ryan Thoma is currently developing a new paradigm in groupware — termed *Pair-Ware* or *Interaction-Ware* — with a Recall-Agent using artificial intelligence algorithms to facilitate communication between a fraternity president and an officer. Other students focus on educational technology, using multimedia to develop training tools, cognitive task analysis, and visual problem- solving techniques.

As inspiration, Dr. Rogers shares information about her ongoing research with the class through short video clips and discussion of the project architecture. She emphasizes "opportunistic" software for domains like medical diagnosis, which are based on the most likely diagnosis rather than absolute right or wrong answers. Her research demonstrates methods for approaching solutions by ranking the possibilities.

> *"Students face a level of discomfort when requirements are not fully specified."*

With the continued development of high-speed communications, multimedia integration, web site technology, and ubiquitous information access comes a growing need for *smarter* software to help companies and consumers cope with information overload and workplace efficiency. The Artificial Intelligence specialization prepares Cal Poly Computer Science students to envision sophisticated machines that will help humans handle the great unknown: our collective future.

Alumni Updates

Mike Dong (BS CSC 1997) – I live in Sunnyvale, CA, and work at Adobe Systems, Inc. in San Jose. There, I am a Member of the Technical Staff for Software Productivity and Release Engineering in the Printing and Systems Division. My responsibilities include the integration, test, build, and release of Postscript products. Prior to Adobe, I was employed at Lockheed Martin Missiles & Space where I worked on the Iridium project and Reusable Flight Software R&D project. I am also a part-time MSCS student at San Jose State University.

John Dudeck (MS CSC 1991) – Since graduating I've been in Charlotte, NC. We are members of a Christian mission called SIM, and I work in our headquarters here. My job is mainly international helpdesk for our use of information technology in administrative offices around the world. We have over 40 offices. Administration overall is about 10% of the organization, and part of my purpose is to make that administration as cost effective as possible.

In particular I have worked with E-Mail. I spearheaded getting it into our organization a few years ago. We are still doing uucp polling of a couple dozen sites in very remote parts of the world, mainly in Africa.

I just got back from four weeks in Switzerland with the family. We have an office there, and I upgraded their network and systems, putting in an NT server and Windows 95 on all the machines. We had a great time visiting old friends and sightseeing.

Randy Kalmeta (BS CSC 1973) – Randy is Director of Systems Management for Sequent Computer Systems Inc., in Beaverton, OR.

John Purlia (BS CSC 1986) – John has recently been promoted to Director of General Engineering at Qualcom in San Diego.

Rodney Doyle Raines III (MS CSC 1992) – Doyle sent greetings from his post as commanding officer of the Coast Guard Cutter DECISIVE. He said life in the Coast Guard remains challenging. In October 1998 the Coast Guard placed DECISIVE in commission - special at the Coast Guard Yard in Baltimore. In the spring there will be full commissioning ceremony in Pascagoula. As he has faced a number of expected and unexpected challenges in putting the ship into commission he often thinks back to advice he received from a commander who said, "You must have an infinite capacity for bad news when you are dealing with ship repair."

Bradlee Terry (MS CSC 1978) – I have an opportunity to teach computer science part-time for an extension program of Penn State, Mont Alto in nearby Chambersburg, PA. There is a new teaching center in a mall with a fully equipped and wired computer lab; it sounds like fun if we can find enough students.

Gary Waples (MS CSC 1982) – Gary lives in Santa Ynez and is a senior software engineer for Delco Defense Systems Operations in Goleta, CA.

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Inquiries, suggestions and comments are welcome.

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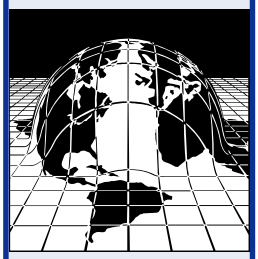
Let's Keep In Touch!

It has been great to hear from so many of you, whether it has been in person, by electronic or regular mail, or by seeing your information appear on our alumni web page.

If you put it off last time, the questionnaire on the back page gives you another chance to tell us about yourself and what we can do for you. You can fax, email, mail or use the web page!



www.csc.calpoly.edu/~alum

a l u m n i s u r v e y

WE NEED YOUR INPUT!

Please feel free to use additional pages.

You can FAX with a business card to: 805.756.2956

or Snail Mail with a business card to:
Cal Poly
Computer Science Department
San Luis Obispo, CA 93407

or Email to estier@csc.calpoly.edu

THANK YOU!

Name _____

Year of Graduation _____ BS or MS (circle)

Where are you and what are you doing now? Please include current job title and employer.

From Your perspective, what should the Cal Poly Computer Science Department be doing today to prepare its graduates for their futures?

As an alumnus, what would you like from the Computer Science Department now and in the future?

Are you interested in opportunities for interaction with fellow alumni and Computer Science Department faculty/staff?

_____ Yes, I am interested - here are some suggestions:

_____ I would like to bring away from such an opportunity:

_____ I would like to contribute to such an opportunity:

_____ I am not interested at this time.

Address _____

Phone _____ E-mail _____

CAL POLY
San Luis Obispo, CA 93407

Computer Science Department
1-11421

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