Letter from the Dean

It is time again to write a note to our alumni and friends. During academic year 2000-2001, the College saw a growth of about 8 percent in the student body. We expect another 10 percent growth during academic year 2001-2002; hence, we're looking forward to a very productive year. With faculty retirements and the growth of the student body, the College is in the process of recruiting at least ten or more full-time faculty members for the Fall 2002 Semester.

We are also getting ready to prepare Self Study reports for all of our programs for a re-accreditation visit in Fall 2003. This will be a time-consuming process and will need some dedication and sacrifice from faculty and staff.

I am extremely sad but need to report to you that at the end of the Spring 2001 semester two of our faculty members from the Computer Science Department, Dr. Floyd LeCureux and Dr. John Gwynn, Jr., passed away. The faculty, staff, and students of the College of Engineering and Computer Science very fondly remember and cherish their contributions to the College over a long period of time.

We truly hope that you will keep in touch with us in the days ahead.

With best wishes

--Braja M. Das
Dean

COLLEGE OF ENGINEERING & COMPUTER SCIENCE
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Mary Jane Lee, Associate Dean
Amanda Carson Banks, Director of Development and Editor of New Dimensions
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Let Us Hear From You!
Please use the attached envelope to send us updates on your career, research, family, or anything you would like to share with your fellow alumni in the "Class Notes" section of New Dimensions. Visit our website and submit such information on-line as well at http://ecs.csus.edu/alumni.html
Cisco Provides New Networking Lab

With nearly $100,000 in equipment and the promise of ongoing technical and financial support, Cisco Systems has established a new networking laboratory in the College of Engineering and Computer Science.

The lab is the first large gift to the University from San Jose-based Cisco, an industry leader in networking for the Internet. It is the result of a detailed networking proposal submitted by computer science professors Dick Smith and Isaac Ghansah for needed components of a network infrastructure (Ethernet switch, routers/layer-3 switches, wireless transceivers). Such components make it possible to develop a dedicated environment supporting graduate and undergraduate instruction in data communications, networking, and distributed computer systems, a much welcomed addition to the curriculum. Because the national information infrastructure that will be built with the "information superhighway" is based on technology fueled by advancements in these areas, they have become among the most important in the computer science and engineering disciplines.

The new lab will allow students in the College of Engineering and Computer Science to get their hands on fast new wireless networks and the most current networking technology. For the first time, students will be working on a network entirely separate from the University's, allowing them a greater chance to experiment and try new applications. And if students manage to create more problems than they can resolve, Cisco engineers will be able to log on and help from their San Jose offices.

The network in the new lab is the size of one typically used in small to medium sized businesses, and allows access for as many as 150 users at once. Students are able to access the lab 24 hours a day or log in from off-site computers.

Construction Management Program Receives Important Grant for Second Year

The Construction Employers' Association (CAE) has again awarded a grant to the College as part of its Construction Management University Grant Program. The Program was started in 1997 to support and promote quality construction management education and to develop long-term relationships with the universities selected to participate in this program.

For the 2000 program year, the CAE received grant applications from five universities: University of California, Berkeley; California Polytechnic State University, San Luis Obispo; California State University, Chico; California State University, Sacramento, and Stanford University. The CAE Construction Management University Grant Program Committee evaluated grant applications based on several factors, including impact to the building construction industry and the quality of the grant request.

CSU, Sacramento's Construction Management Program and University of California, Berkeley tied for first place, with CSU, Sacramento receiving a grant to develop a multifaceted fund-raising and recruitment effort to assist in developing alumni connections and future support, and to offer a site-based construction documents clinic.

Last year, CSU, Sacramento's Construction Management Program's grant request came in first place with a proposal to develop a cooperative, discipline-based pilot program, whereby a contractor would employ a construction management student and cooperate with faculty to attain specific academic goals for this student. CAE Construction Management University Grant Program funding was used to administer the program.
Short News Notes

Scholarship Program Receives Renewal

More than 50 engineering and computer science students each semester will continue to receive tuition and paid work experience thanks to the National Science Foundation's generosity.

The scholarship program was originally funded with a two-year, $220,000 grant from the NSF Computer Science, Engineering, and Mathematics Scholarships Program. Low-income students in their final two years of undergraduate study were the targeted recipients. Thanks to the hard work and efforts of the College's MEP Program that has been running this scholarship program, NSF has renewed the scholarship initiative for an additional two years with a grant of $250,000.

Each student will continue to receive about $2,000 annually, along with placement in paid work experience with the assistance of the CSUS Cooperative Education program, the largest co-op program in California. These combined funds will cover most of an average student's expenses, including housing. Students also will continue to receive the mentoring and professional development assistance that the NSF was most impressed with.

HP Designates CSU, Sacramento as their Number One Hiring School in 2000-2001 Academic Year

The HP college hiring numbers are out and I'm really proud to say that CSU, Sacramento was once again the number one provider of college graduates to the Hewlett-Packard Company in the year 2001. This follows a successful year in 2000 when CSUS was also the number one provider! The 2000 numbers represent a total of 70 students from CSU, Sacramento; 42 full time permanent hires and 28 internship hires. We didn't just beat out all the CSU schools; we beat out every institution of higher education in the country, with a number 10% higher than the next closest university. That is quite an accomplishment. I think we can all be really proud of this accomplishment and I hope that it brings many rewards to both of us in the coming years.

- John Schimandle, BS'80, EEE
Hewlett-Packard Campus Recruiting Manager
Member, College of Engineering & Computer Science Industry Advisory Board

College Hosts 3rd Annual Engineer's Day on Campus

As part of the "National Engineer's Week" in February, the College hosted its third annual Engineer's Day on Campus for area high school juniors and seniors and their parents and guardians. Donations from area companies, particularly from Hewlett-Packard, Roseville, and Intel, Folsom made door prizes, luncheon for all, and tee-shirt give-a-ways possible. Following an opening presentation that included welcomes by Dean Braja M. Das and by the President of the College's Industry Advisory Board, Terry Pearson of Aerojet, The Day on Campus program included workshops on Career Planning, Co-Operative Education Opportunities, Diversity, Financial Aid, and one-on-one and open dialogue with professors and students in the majors within the College. The Day on Campus for this year will be February 23rd. Join us!

Intel Adds Power to Computer Engineering Program

The Intel Foundation has once again made substantial gifts of technology to the College of Engineering and Computer Science in support of the Computer Engineering Program. This year, Intel has focused their attention and support on upgrading the computer infrastructure in two laboratories critical to this program: the Computer Engineering Design Lab in Riverside Hall 3001, and the Logic Design Lab in Riverside Hall 3005.

In the Fall, Intel donated a dozen high-end workstations in order to replace the existing ten UNIX workstations in the Computer Engineering Design Lab. The computers will be used by students learning to design and build computer circuitry, students working on embedded process system design, and by students working on senior projects. Each computer is capable of running both Windows NT and UNIX operating systems, giving users access to both standard desktop applications and the specialized engineering software that the Design Lab is known for.

In the late spring, another donation by the Intel Foundation significantly re-did the Logic Design Lab. All first year students in computer engineering and electrical & electronic engineering are strongly urged to take an "Introduction to Logic Design." The course requires some software exposure, and quickly moves through logic gates, sequential circuits, state machines, and into an introduction to computer architecture. The addition of new and faster systems has been a growing need. The donation of 25 Dell Pentium III systems replaced all the existing workstations and is expected to make a significant difference. The lab also received an over-all refurbishing including the installation of various media, new workbenches, and chairs.
New Energy Lab Offers Powerful Lessons

A loud micro-turbine generator that began life as an aircraft's backup power is now the star of a new lab in the CSUS College of Engineering and Computer Science, where engineering students are getting their hands on a possible solution to the state's growing energy shortage.

The Cogeneration Lab produces energy in the micro-turbine, which operates on natural gas. It then uses the thrown off steam to power a large refrigerator. Relatively simple in theory, cogeneration yields impressive results as far as overall efficiency. And the technology is becoming much more widely used in the real world. "The technology is becoming extremely popular, so when our students go out in the workforce having hands-on experience working on them they will have a definite advantage," says Andrew Banta, the CSUS mechanical engineering professor who led the effort to build the lab.

Cogeneration all starts with turbines, which, as a class, are much smaller than traditional steam plants. They're little more than jet engines modified to sit on the ground, and are better for the environment than steam plants. They can also power up in minutes rather than many hours, allowing quicker and cheaper response to peak energy demands. All of that has attracted the attention of power companies. The catch is that turbines cost too much to operate on their own. They're only economical when they're used to power a secondary operation by producing steam, which is the essence of cogeneration. Locally, for example, the Campbell Soup Company powers a steam turbine with heat thrown off by SMUD gas turbines.

At CSUS, the cogeneration lab produces enough electricity to power 10-12 homes, and powers a refrigerator about three times the size of a typical home air-conditioning system. Although this electricity and cooling are essentially wasted, the experience about 100 students are getting every year with cutting edge energy technology is invaluable. Students are learning to measure the energy output of a cogeneration plant, and experimenting with various ways to make the plant more efficient. They're also working with turbine efficiency and heat transfer rates.

The lab was installed in Santa Clara Hall in late 1999, and got its first semester of use last year. It replaces an old steam turbine system that was out of date and becoming increasingly difficult to maintain. Bruce Scott, a technician in the College of Engineering and Computer Science, led the installation of the new lab, with help from Jim Penaluna, also a technician in the College.

Planning and funding the lab took six years of work by faculty, students, and staff. Over that time, Banta and his group acquired more than $250,000 in grants and gifts for the project. The National Science Foundation provided $100,000; PG&E gave $20,000 and the University provided $75,000. SMUD initially gave a gift of $70,000 and continues its support with smaller donations yearly. In addition, the planning and design of the lab provided senior projects for numerous groups of engineering students.

Banta says he's thrilled with the result, but he's still hoping to do more. His next goal for the lab is adding a steam turbine, so that students can learn to manage a cogeneration plant using that common feature. It's a $100,000 project.

Industry Advisory Board Creates New Scholarship Program

In an effort to provide scholarship support for students enrolled and majoring in engineering and computer science at California State University, Sacramento, the College’s Industry Advisory Board, led by board member Orin Bennett (BS’71, CE) have designed and implemented a scholarship program that provides tuition support in the form of scholarships, and also offers the possibility of internships and part-time work with the sponsoring businesses. The Industry Partners’ Scholarship will match the student majors with the primary business focus of the donor (e.g., construction companies funding scholarships for construction management majors).

Not only will this program provide the much-needed support and hands-on experience for students, it will also establish and strengthen relationships between area businesses and the College, and between area businesses and possible future employees. The first Industry Partners’ Scholarship has been donated by AeroJet and will support two Mechanical Engineering students this academic year. Additional local businesses are being actively recruited for involvement in this program that, when fully funded, will provide scholarships to students majoring in all the areas offered by the College.

The criteria for selection of the scholarship recipients will be as follows: All applicants must be a recently declared engineering or computer science major at CSUS, or incoming transfer students from a community college program declaring an engineering or computer science major. If a student meets the university's general admission and continued enrollment requirements, they will be considered eligible to apply to this scholarship program. All applicants must submit a letter of recommendation from either a community college instructor or from an ECS faculty member. Financial need will be strongly considered in the selection process.
Grant from Synopsys Builds on University's Computer Engineering Program

Computer Engineering students at California State University, Sacramento have gained increased access to the latest generation of circuit design software, thanks to a recent grant from Synopsys, Inc.

Sunnyvale-based Synopsys is one of the world's top makers of electronic design automation software. Its Design Compiler and FPGA software is used to design integrated circuits, the electronic devices found in everything from microwaves to IMAX theaters. COSSET is used in designing digital filters such as those found in digital cellular phones.

Synopsys has donated important software to CSU, Sacramento for a number of years, and for this reason is in part responsible for the growth of the Computer Engineering Program. The grant this year includes licenses for Design Compiler, COSSAP and FPGA Express which will further this program. This software is one of a number software packages CSUS uses to teach integrated circuit design.

"The company is impressed with our reputation and our hands-on approach to teaching," says Ron Becker, coordinator of the CSUS computer engineering program. "In addition to providing these grants, it has joined companies like Hewlett-Packard and Intel in employing large numbers of our graduates."

American Public Works Association Donates New Lab For CSUS Civil Engineering Students

A generous donation from the Education Endowment Fund of the Sacramento Chapter of the American Public Works Association (APWA) has made possible a new laboratory in the California State University, Sacramento's Department of Civil Engineering.

This gift is the result of a detailed proposal submitted by the College of Engineering and Computer Science and Civil Engineering professor, Cyrus Aryani, to the Chapter, and makes possible the purchase of the United "Smart I" Electromechanical Testing Machine, the most versatile electromechanical testing machine that performs the various tension and tear tests for strength determination of geosynthetics. The Sacramento Chapter has also generously volunteered their assistance in identifying additional support for further enhancement of this laboratory.

The new lab is an entirely separate and smaller lab within the College's existing Geotechnical Laboratory. It will facilitate the hands-on education of students working in the new and exciting field of Geosynthetics Engineering that addresses the use of polymeric materials in construction. These polymers, known as geosynthetics, improve properties of earth materials and allow construction of structures at difficult sites and on unsuitable soil conditions. Geosynthetics must be tested in the laboratory for their strength and performance to verify the design parameters.

The American Public Works Association is an international educational and professional association of public agencies, private sector companies, and individuals dedicated to providing high quality public works, facilities, and services. Originally chartered in 1937, the APWA is the largest and oldest organization of its kind in the world.

A ribbon-cutting ceremony in October celebrated the official naming of this new facility as "Sacramento Chapter, American Public Works Association, Geosynthetics Laboratory." University officials, College faculty, and members of local geotechnical and civil engineering firms were in attendance. The lab is the first gift to the University from the APWA.
Tech Specialist Receives Annual Scholarly Achievement Award

Mechanical engineering professor Thomas Tien-I Liu, whose expertise includes using cutting edge software and Web applications to improve manufacturing, has received this year's Outstanding Scholarly Achievement Award at California State University, Sacramento.

Liu accepted his award and delivered a lecture titled "Information Technology, Concurrent Design, and Continuous Improvement: Techniques for Global Competitiveness" at a University-wide event on Monday, May 7 in the University Union Hinde Auditorium.

Liu is the 40th recipient of the Outstanding Scholarly Achievement Award that is given annually to a CSUS faculty member who has made significant contributions to a discipline through scholarly activity, creative or artistic endeavors, research, and publication.

Liu's recent work with "intelligent" manufacturing has drawn worldwide interest. His talk Monday was tailored for a non-technical audience, focusing on the importance of educating individuals who can use technology to compete in an era of increasing globalization.

Liu came to CSUS in 1987 after 14 years working in private industry and teaching at other academic institutions. He has written more than 70 technical papers and written or edited 19 books, manuals, and reports. This year, in addition to receiving the Outstanding Scholarly Achievement Award from the University, he received the Outstanding Scholar Award from the CSUS College of Engineering and Computer Science.
Floyd LeCureux and John Gwynn Remembered

This summer, the College of Engineering & Computer Science and the family and friends of Floyd Ernest LeCureux and John Minor Gwynn, Jr., experienced an unexpected and tragic loss when these two long-time professors of Computer Science passed away.

Floyd LeCureux joined the faculty of CSU, Sacramento in 1979 as an Associate Professor of Computer Science. Floyd’s technical expertise, innovative ideas, and his commitment to providing students, faculty, and staff with a user-friendly "seamless" environment were instrumental in the development of the most progressive, advanced, state-of-the-art computing facilities and infrastructure of any college at CSUS and, very likely, in the entire CSU System.

Under Floyd’s leadership and guidance, the College’s transition to Riverside Hall in 1989 saw a significant expansion of computing facilities. At the CSU system-wide level, he served on four major committees and chaired the CSU Computer Aided Productivity in Engineering for many years. On May 18, 2001, Floyd received the Outstanding Service Award in Computer Science in recognition of his many contributions to the Department, the College, the University, and CSU System. His eternal optimism, visionary ideas, cooperative efforts, and easy-going style will be greatly missed by the College. In the words of a colleague, "Floyd never met a problem he did not think he could solve."

John Minor Gwynn, Jr., "Big John," joined the faculty of CSU, Sacramento in 1977 as an Assistant Professor of Computer Science. John was a graduate of Phillips Exeter Academy, and took his B.S., M.S., and Ph.D. at the University of North Carolina, Chapel Hill. John specialized in systems programming with a research interest in gaming simulation. He wrote many articles on this topic and did much consulting with various Nevada casinos. John received the Outstanding Teacher Award from the College in May 1996 in honor of his excellence in teaching and for the very high-regard that students had for him.

John insisted on teaching a full-load every semester and banished all discussion of retirement. Over the years, he contributed directly to the education of countless students who have only words of praise and delight when they remember their classes and conversations with John. As one alumnus stated at the memorial service, "His students were the primary motivation of his all work and efforts; students always came first."

The College has established endowed memorial scholarships in both John's and in Floyd's names. These scholarships will make a significant impact on the education of future generations of computer scientists at CSU, Sacramento, just as Floyd and John did through their years of teaching. For more information on these scholarship accounts, please contact the Dean's Office at (916) 278-6629 or via e-mail at banksa@ecs.csus.edu.

The CSUS Legacy Circle

For more than half a century, California State University, Sacramento has opened the doors of higher education to new generations of students. This tradition of affordable excellence is continued in our day both by state appropriations and, increasingly, by private funding. Indeed, the state now provides less than one-half of the University's operating budget each year. Thus, the quality of a CSUS education would not be the same without the generous support of donors committed to educational opportunity.

A bequest to CSUS through your will or living trust will provide a legacy to benefit the students of future generations. Whether a bequest is unrestricted or designated for scholarships, equipment, curriculum enhancement, or other purposes, your bequest can make a real and lasting difference in the lives of the students it touches.

Don't overlook the many ways to make bequests through your estate plans:
- Designate CSUS to receive your savings account, mutual fund, or savings bonds after your death.
- Name the CSUS as beneficiary of a life insurance policy you no longer need. Or, donate the policy and get a tax deduction.
- Name CSUS as beneficiary of an IRA or annuity. Assets may be distributed tax-free to a qualified charity but often generate large amounts of taxable income to your heirs.
- Give a gift ($5,000 minimum) that pays you income for life, such as a charitable gift annuity. You get a partial tax deduction and capital gains advantages – and CSUS receives your gift after your lifetime.

By virtue of including CSUS in your estate plans through a bequest or other planned gift, you can join other like-minded members of the CSUS family as part of the "Legacy Circle."

For more information about making a bequest to CSUS, call the University Advancement Office at (916) 278-4079; e-mail us at sahard@csus.edu or send a letter requesting more information to Sheila Hard, 7750 College Town, Suite 200, Sacramento, CA 95826-2344.
College Presents Outstanding Teacher, Researcher, Service and Staff Awards at Annual Ceremony

Each Spring, the College of Engineering and Computer Science confers awards that honor and recognize the achievement, devotion, and talent of an Outstanding Teacher, an Outstanding Researcher, and an Outstanding Staff member. This year, the award ceremony was held on May 18, 2001 and recognized Estelle Eke, Professor of Mechanical Engineering as the Outstanding Teacher of the year. The Outstanding Scholar this year was Tom Liu, Professor of Mechanical Engineering for his work using software and web applications to improve manufacturing. Professor Liu was also recognized in a University-wide ceremony that honored him as the University’s chosen “Scholar of the Year” (see associated article). The Outstanding Staff member this year was Ray Fraizer in the College’s Computing and Communications Services. Ray, an alumnus of the College, was recognized for his tireless, patient, and crucial behind-the-scenes work with the College’s Network and Computing Services. In addition, the College began a new award category this year, the Outstanding Service Award that recognizes work above and beyond within the individual departments. This year, the Dean awarded Outstanding Service Awards to: Vishnu Agaskar in Civil Engineering; Floyd LeCureux & Anne-Louise Radimsy in Computer Science; Suresh Vadhya in Electrical and Electronic Engineering; and Fred Reardon in Mechanical Engineering.

All the recipients were recognized at the reception and were presented with a plaque and a gift by Dean Das. The names of the recipients will also be listed on the plaques displayed in the foyer of Riverside Hall.

Past Recipients of these awards from Engineering and Computer Science include:

**Outstanding Teacher**
- Preetham Kumar 1999-2000
- Fred Reardon 1998-1999
- Jean-Pierre Bayard 1997-1998
- Turan Gonen 1996-1997
- John Gwynn, Jr. 1995-1996
- Kenneth Kerri 1994-1995

**Outstanding Scholar**
- Cui Zhang 2000
- Warren Smith 1999
- Du Zhang 1998
- François Cheong-Siat-Moy 1997
- John Balachandra 1996

**Outstanding Staff**
- Gail Peters 2000
- Cici Mattiuzzi 1999
- Shelly Hedberg 1998
- Bruce Scott 1997
- Barbara Dietrich 1996
- Gwen Smith 1995

Ray Fraizer receives the award for the Outstanding Staff Member of the Year from Dean Das.
Steel Bridge Team WOWs Mid-Pacific Regional Competition

Congratulations to the CSUS Student Chapter of the American Society of Civil Engineers and the 2001 CSUS Steel Bridge Team. They out-built and out-placed local rival U.C., Davis at the Mid-Pacific Regional Competition on Saturday, April 28th, placing 2nd in the annual engineering challenge. Although CSU, Chico (last year's national 1st place winner), won the regional competition this year, CSUS's 2nd place rank at the regional competition qualified the team to compete in the national competition May 25th and 26th at Clemson University in South Carolina. This is the second year in a row, and only the second time ever that the CSUS Steel Bridge Team has done this.

More than 400 civil engineering students from 43 colleges across the United States and Canada took part in the national competition at Clemson University, where the winning bridge was built by the team from Clemson. The University of Florida placed second and the University of Louisiana-Lafayette placed third overall.

Students Work with Yale Team to Provide Remote Medical Care

CSUS engineering students have been working with a Yale University team on an ambitious system for providing specialized medical care in the world's most remote regions. The students, who are working on their senior project, have already developed highly efficient approaches for sending wireless video transmission. Now, they're working to perfect the approach so they can simultaneously send digital video over four different frequencies.

Their work will help Dr. James Rosser, director of the Yale's Endo-Laparoscopic Surgery Center, improve the reach of medical experts using laparoscopic surgery techniques, which are minimally invasive and use small cameras so surgeons can watch what they're doing on a video screen. Rosser wants to beam the surgical camera images from a site or sites to medical specialists nearby, who would provide real-time advice. He envisions a group of specialists in a medical van supporting a group of surgeons who reach patients using small all-terrain vehicles. But the video was a stumbling block. The Yale team planned to send video from surgery sites to a weather balloon and a small, remote-controlled plane, but the plane was unable to carry enough equipment.

The CSUS students tackled the problem not by trying to improve the plane or its batteries, but by creating better video compression techniques. "They've just done some amazing work," says CSUS engineering professor Warren Smith, who initially put Rosser in touch with the students. "Who would have thought, at the beginning, that video compression would be the answer to so many technical challenges with this project?"

From the Career Office

The College of Engineering and Computer Science had another excellent year in internship, co-operative education, and permanent employment placements. As mentioned above, CSUS supplied the most new employees to Hewlett-Packard in the country, and a number of other corporations hired in similar numbers. We are indeed the supplier of engineers and computer scientists, not just California, but to the world! The top twenty companies that hired graduates and current students at the College are listed below.

Hewlett-Packard  
Intel  
NEC  
Aerojet  
CalTrans  
Agilent Technologies  
DST Innovis  
Anheuser Busch  
Folsom Research  
HDR Engineering  
C.C. Meyers  
Motion Control  
Siemens Transportation  
Schilling Robotics  
Tesco  
PG & E  
Powerwave  
Zworld  
New United Motors  
Manufacturing  
Hansen Information Technologies

--Cici Mattiuzzi  
Director, Career Services Office  
College of Engineering & Computer Science
Construction Students Have Best Bid in Reno

On February 1st through the 3rd, seventeen members of the Construction Management Student Association (CMSA) joined some 400 other university students at the 14th Annual Construction Management Competition in Reno, Nevada. Co-sponsored by Associated General Contractors, and the Associated Schools of Construction (ASC), the expanded event, included job fairs, faculty meetings and presentations, speakers, and the marathon student construction problems, some lasting up to 20 hours. The problems covered three categories: Heavy Civil, Commercial, and Design Build.

At 6:00 a.m. the team was handed construction documents for a very large and very real construction project, and challenged to develop cost estimates, schedules, staging plans, management plans, and to address other job specific problems. All this, however, had to be accomplished with only sixteen hours to complete an entire proposal for the project. All three CSUS teams successfully completed and hand delivered their proposals on time. The Commercial Team was victorious, bringing home the award for "Closest to the Pin." Given a project with an estimated value of $25 million, the team spent a grueling day and half preparing their proposal before presenting it to a panel of judges. The team was notified the following day that they had come within $35,000 of the actual cost!

In addition to the success of the Commercial Team, the Heavy Civil students had the 4th closest bid of 10 teams. As for the Design Build team, they completed their bid with a team comprised of one freshman, two juniors, and two seniors. Congratulations to the Commercial and Heavy Civil teams and to those students listed below that competed.

**Heavy Civil**: Bill Jensen, Daniel Chen, Chapman, Kyle Stuart, Mike Gaub, Geren Shankar

**Commercial**: Phillip Lee, Chris Page, Trevor Farnam, Lamar Hinds, Alba Diaz, William (Eric) Malchow

**Design Build**: Mike Thomas, John Russell, Theresa Gneighting, Kevin Larson, Josh Houck

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EEE Students Win Contest

CSUS hosted the bi-annual IEEE Central Area Region 6 meeting and contests on May 5th. I am very pleased to announce that the Senior Product Design students from Prof. Mahlon Heller's class did superbly in the Design Contest, capturing first, and second place in the competition. The contest this year was the closest we have had since it's inception in 1992 and featured 8 outstanding entries. The Judges commended all participants on the quality of the competition and had a really challenging assignment in selecting the ultimate winners.

Coming in first place ($300 cash prize) was the G-O-A-T (Grass Overland Automatic Trimmer) by Benny Beltran, Courtney Howerton, Justin Giachino, and Mohamad Hamada from EEE 193B and a close second ($200 cash prize) was the "Solar Powered Automatic Light" by Ken Groza, Sang Jun, Noah Pennington, and Prakash Sah, also from EEE 193B. Congratulations to Mahlon and his students for a great job! Don't miss these projects when the Senior Project Demonstrations are held later this semester.

The objective of the Design Project Contest is to demonstrate good engineering design and individual or team effort in the construction and demonstration of a design project. A design project will, in general, result in a piece of hardware; e.g., a product prototype, an experimental apparatus, etc. Emphasis is placed on a working project and contestants are expected to use good electrical engineering design and design practices as demonstrated in electrical design, layout, component placement, wiring, construction, testability, maintainability, appearance and human factors.

Seven student branches (of the 12 active branches) from the Central Area participated in the contests. Honors in the Student Paper Contest were shared between the University of Nevada, Reno and San Francisco State University. In the MicroMouse contest, the honors were shared between CSU Chico, and University of Nevada, Reno.

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**S. K. Ramesh, IEEE Central Area Chair, Region 6 Chair, Department of Electrical and Electronic Engineering**
Mechanical Students have the Right Formula

In May, the student chapter of the Society of Automotive Engineers traveled across the country to participate in a national competition in a car they designed and built from scratch. The competition, the Formula SAE, is a collegiate design competition held in Pontiac, Michigan every spring. Sponsored by Ford, Daimler Chrysler, GM, and the Society of Automotive Engineers, the competition attracts entries from over 120 colleges and universities around the world. To compete, students must conceive, design, and manufacture an open-wheeled, formula-style racecar. Restrictions are put on the design of the engine and frame, and cost of production, in order to challenge the students' knowledge, creativity, and imagination. The event gives students the chance to build-up their engineering, hands-on, and team skills that in turn will give them the edge they need to succeed in the highly competitive and demanding field of engineering. The car must be powered by a 600cc or smaller, 4-stroke engine which breathes through a 20 mm intake restrictor. The car must also have at least a 60" wheelbase, 4 wheels with good brakes, and at least 2" total suspension travel. Essentially, the task is to design and build a prototype of a formula-style racecar of the type that would be sold to the amateur weekend auto-crosser.

After a lot of hard work, the mechanical engineering students in the CSUS Chapter of SAE made it to the competition this year with their well-designed and much labored-over 2001 Formula SAE Car!! The CSUS car has the following features: 1020 steel space-frame, 13" Monocoque racing wheels, a 1993 Kawasaki ZX-6 engine, Haltech E6-S fuel injection computer, Spool rear end, Fox Shox double-adjustable, coil-over dampers, and front and rear pushrod-actuated inboard suspension. The team, after driving all the way to Michigan, passed the tech inspection the first time through, made it through all of the tests necessary to drive in the dynamic events, and drove in every event. The team did well by getting a running car to the competition at all (many schools failed to do this), coming in at 86th overall in a field of 137 competitors (some hailing from France and other international universities)! The team feels they might have done better in all the events if they hadn’t run out of time before leaving for Michigan, losing the opportunity to test and develop the car further or train their drivers.

The team vows that the 2002 car will be done much earlier, having started work on the design as soon as they returned from Michigan. They appear to be well on the road to meeting their self-imposed February 2002 deadline to have a drivable car. This will give them the time and the road experience to break-in the car, train the student drivers, and see if there need to be any adjustments.

Visit their website over the next months to watch their progress.
http://hornet.racing.tripod.com/index.htm

The CSUS Formula SAE Team in Michigan
From left to right, John Boyd, Rodney Sparks, Jon Crosby, Nathan Emmett, Brad Sherman, Eric Herbold, Jacob Nuttall, faculty advisor Professor Joe Haaralson, Jason Dubose, Brian Starkovich, and Tarrick Grant.
Alumni News Notes

Aditya Kulkarni, MS’97, CSC, is Chairman and Chief Operating Officer of SmartYantra Technologies in Bangalore, India.

Brad Aronson, BS’83 CM, is Co-Founder and President of Program Management, Inc., and a recipient of a Distinguished Alumni Award at the annual Alumni Honors Luncheon, held on October 5, 2001.

Ira Quintanar, BS’99, CE, is a Bridge Inspector with CalTrans, in Sacramento.

Donald Bradford, BS’84, CE, MS’97, CE, is Director of Sanitation Facilities Construction Program for the California Area Indian Health Service and a recipient of a Distinguished Alumni Award at the annual Alumni Honors Luncheon, held on October 5, 2001.

Mark W. Niswonger, BS’84, CSC, is VP Engineering / CIO at NCS in San Ramon, CA.

Christopher Choukas, BS’90, EEE, is vice chair of the Sacramento Chapter of the IEEE Lasers and Electro-Optics Society and a recipient of a Distinguished Alumni Award at the annual Alumni Honors Luncheon, held on October 5, 2001.

Gary J. Brum, BS’98, CSC, is Technical Director at Pixar Animation Studios and a Distinguished Alumni Award at the annual Alumni Honors Luncheon, held on October 5, 2001. He will receive an M.S. from Texas A&M in December 2001.

Rod Sherry, BS’96, CE, is Staff Engineer, Cullen Engineering Associates, a civil, survey, and land development firm.

Shane Kemper, BS’99, ME, is an Aerospace Design Engineer at Paragon Space Development Corporation’s Berlin office, and has been a contributor to New Dimensions.

Gee B. Hahn, BS’71, MS’75, EEE, is a senior engineer and program manager in the area of telecommunication engineering at the U.S. Department of Defense in Maryland.

Don Maddy, BS’76, CSC, recently received his MS in Computer Science from CSLU, San Luis Obispo. After 25 years in computer programming, 16 of these as President and CEO of the Maddy Corporation, he has retired and is now on staff with PG&E as a Senior Systems Analyst and DBA.

Kamran Mohajer, BS’85, EEE, is Operations Manager for Cisco Systems in San Jose, CA.

William M. Moore, BS’76, ME, is the Co-President of the Videochip Lab in Concord, CA.

William J. Bennett, BS’77, CE, is a Resident Engineer for Anheuser Busch in Fairfield, CA.

Pothad Manourian, BS’77, CE, is Chief Assistant Director for the County of Marin in California.

Curtis Ray Snyder, BS’86, EEE and his wife Deborah live in Tampa Bay, Florida.

Kendrick R. Sutherland, BS’77, CM, is the Project Manager for Jackson Properties, Inc., in Sacramento, CA.

Laine Fuller, BS’83, CSC, is the District Sales Manager for Intersatellite, Inc., in San Francisco, CA.

Nayan M. Vora, MS’74, CE, is a Project Specialist for the Tennessee Valley Authority in Chattanooga, Tennessee.

James Fisher, BS’89, MET, is a Public Outreach Officer for the California Air Resources Board.

Scott Maxwell, BS’85, CM, is a Vice President of Under Construction, Sacramento, CA.

Thomas G. Tracy, BS’81, CE, is Assistant Vice President and Area Manager for Parsons, Brinkerhoff Quade, and Douglas, Inc., in Sacramento, CA.

Chad Guest, BS’86, CSC, is Vice President for Research and Development for Escape Technology in Roseville, CA.

Jeanette Leavens, BS’00, ME, married Gary G. Kwong, BS’98, MIS, on March 24th in Sacramento, CA. Jeanette is a past president of the student chapter of the American Society of Mechanical Engineers, and has been a contributor to New Dimensions.

In Memory

Melissa Madison, BS’82, ME, and her husband, Stephen Charles Ramos, BA ’80, BIO.

Thomas Richards, BS’01, CE. A memorial scholarship in the Department of Civil Engineering has been established by Tom’s family to support many students of civil engineering in the years to come.

Scott McCracken, BS’87, ME; BS’87, CSC.

Joseph Fallon, Jr., BS’71; MS’75, EEE.

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The College of Engineering and Computer Science welcomes the contributors to its four donor societies for the 2001 fiscal year (July 1, 2000 - June 30, 2001). It is the generosity of all donors to the College of gifts and in-kind donations that supports and strengthens scholarship programs, facilities enhancement, and research at ECS. We would like to particularly note our gratitude to these individuals and businesses for their leadership gifts.

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