Congratulations graduates!

You have much to be proud of. You’ve had your learning curve and your capacity for knowledge tested by some of the brightest teachers and researchers on the planet. You’ve survived all they could throw at you: the coursework, the problem sets, the labs and the late nights. You’ve mastered the hardest majors Berkeley has to offer. That in itself is no small feat.

But you have not just learned about cool new technologies. You have acquired the tools to create new knowledge and to be technology leaders in a global arena.

I’m confident that each of you will soon be leading teams of innovators and providing solutions to the most complex problems confronting society. I look forward to reading about your accomplishments in newspapers and journals years hence.

As you head out into the world to shape your individual careers, I encourage you to look not just at the technology you’re creating or the system you’re building, but at the people around you—even the ones you’ll never meet—and their many needs. You have the capacity to make their lives better. That is the hallmark of a Berkeley Engineer.

In honor of your past and future accomplishments, we dedicate this issue of Engineering News to you. Please keep in touch with one another and with us; we’d love to hear your next success story. On behalf of all of us at the College, best wishes and, again, congratulations!

—S. Shankar Sastry, Dean
UC Berkeley College of Engineering
Senior moments from Engineering News

Class of 2008 makes College of Engineering headlines

- CEE senior Elyse Wong, an NCAA Academic All-American on the Cal Women’s Gymnastics team, became one of four Cal student athletes honored with a $3,000 Pac-10 Postgraduate Scholarship for future graduate work. Next year, she’ll go to Stanford for graduate school in structural engineering.

- Last year ME senior Dan Dzoan solved a 3x3x3 Rubik’s Cube one-handed in 17.9 seconds, setting what was then a world record in speedcubing. Dzoan also led cubing classes and helped found the Rubik’s Cube Club on campus. Not bad for someone who learned to solve the puzzle two years earlier.

- It was BioE senior David Shis’s last tango in Berkeley. Shis competed with the UC Berkeley Ballroom Dancers team for the final time in April, having risen to its championship level of competition within a few years. He and his dance partner placed third, sealing their reputation as one of Cal’s best dancing duos.

- “Q. Did you hear the one about the dyslexic devil worshiper? A. He sold his soul to Santa.” You can find this joke on “Jester: Jokes for Your Sense of Humor” and rate whether it’s funny or not. Based on the results, Jester recommends other jokes suited to your taste. The researcher behind the software was EECS senior Tavi Nathanson, who turned Jester into a serious project: his master’s thesis.

View from the summit: Richard Blum, financier and philanthropist, to deliver 2008 Commencement remarks

Richard Blum stands quite tall. At well over six feet, he’s a towering figure in the worlds of business and philanthropy. He’s also a mountaineer and world traveler, a Cal graduate and this year’s keynote speaker.

In 1981, Blum found himself at 17,600 feet above sea level, organizer of an American expedition to chart the first modern route up the eastern flank of Mount Everest. Ultimately, the team was forced to abandon its summit attempt, but Blum’s life continued on an upward trajectory.

Today, the Berkeley MBA graduate is chairman of his own investment firm, Blum Capital Partners, which manages $3 billion in assets. He’s married to Diane Feinstein, former San Francisco mayor, now a U.S. senator. He chairs the UC Board of Regents and enjoys friendships with the Dalai Lama, Al Gore and Jimmy Carter.

Yet the 72-year-old continues to follow his passion for the Himalayas, inspired by its geography and people. He started a nonprofit called the American Himalayan Foundation, which builds schools, health clinics and clean water systems in the region.

Recently, Blum organized a team to conquer another great height: global poverty. In 2006, he donated $15 million to launch UC Berkeley’s Richard C. Blum Center for Developing Economies, an interdisciplinary teaching and research center to alleviate poverty.

Berkeley Engineering, says Blum, plays a key role in the center’s transfer of technology to the developing world. “This is where innovation is making a difference,” he says. “Engineering is the nuts and bolts of how you improve people’s lives.”
Citation Winners

Widya Mulyasasmita, BioE
Hometown: Jakarta, Indonesia
GPA: 4.0
Best Berkeley moment: “Watching the total lunar eclipse from the Big C during freshman year.”
Plans after graduation: Graduate school at Stanford in bioengineering
Words of wisdom: “Stop and smell the roses!”

John McLaughlin, CEE
Hometown: Davis, California
GPA: 3.96
Best Berkeley moment: “Competing in spring break tournaments in Austin, Texas, with the Cal Ultimate Frisbee team.”
Plans after graduation: Work at IRIS Environmental, an environmental consulting firm in Oakland
Words of wisdom: “Leave time for what you enjoy.”

Matt Johnson, EECS
Hometown: Hillsborough, California
GPA: 3.97
Best Berkeley moment: “Being a TA for CS 61C and EE 126. It’s been interesting and fun to help my fellow EECS majors and discover my own passion for teaching.”
Plans after graduation: Graduate school at MIT in EECS
Words of wisdom: “The cake isn’t a lie.”

Hometown: Cupertino, California
GPA: Undisclosed
Best Berkeley moment: “Moving into Barrows House sophomore year and getting the opportunity to live with and meet wonderful people!”
Plans after graduation: Graduate school at Stanford’s Institute for Computational and Mathematical Engineering
Words of wisdom: “Optimism, diligence, passion and humor.”

Asmita Karandikar, IOR
Hometown: Concord, California
GPA: 3.96
Best Berkeley moment: “Remembering all the fun times I’ve spent with my closest friends.”
Plans after graduation: Graduate school at Stanford in management science and engineering
Words of wisdom: “Never stop dreaming.”

Daan Stevenson, ME
Hometown: Los Altos, California
GPA: 4.0
Best Berkeley moment: “Finding Cal Cycling, and every weekend I got to race bikes.”
Plans after graduation: Either a fellowship in Geneva, Switzerland, or work and travel
Words of wisdom: “Find your niche and enjoy.”

Karen Yee Man Cheng, MSE
Hometown: Hong Kong, China
GPA: 3.97
Best Berkeley moment: “Taking naps in the library.”
Plans after graduation: Graduate school at Stanford in mechanical engineering
Words of wisdom: “Eat, sleep and travel lots!”

Tingzhou Fei, NE
Hometown: Shenyang, China
GPA: 3.84
Best Berkeley moment: “Studying with friends in a study group. It doesn’t make homework easier but makes learning more fascinating.”
Plans after graduation: Graduate school at MIT in nuclear science and engineering
Words of wisdom: “Rainbows always come after a storm.”

Bechtel Achievement Award: Widya Mulyasasmita, BioE/MSE
Bechtel Engineering Scholarship: Tim Fei, BioE

To say BioE/MSE senior Widya Mulyasasmita has a phenomenal academic record is an understatement. She graduates with a perfect GPA, including more than 20 A’s, and top honors from the BioE department (see citation winners above). Mulyasasmita has also volunteered at Oakland’s Children’s Hospital and conducts graduate-level research in BioE/MSE professor Kevin Healy’s Biomimetic Materials and Tissue Engineering Laboratory, where she’s exploring biomedical materials. (Next year, she’ll head across the bay to Stanford for a Ph.D. in bioengineering.) But don’t think this native of Indonesia is all work and no play. You’ll find her hiking the Berkeley hills and unwinding at the piano. “UC Berkeley has been my dream school,” she says.

BioE junior Tim Fei brings an unbridled enthusiasm for math and science to all his tutoring activities. As a graduate student instructor for his favorite class, organic chemistry, he volunteers to lead an extra discussion group above and beyond his routine responsibilities so students can ask questions and explore ideas. “OChem is a cool mental workout,” says Fei, who has a 3.8 GPA. “I just love the synthesis.” In addition to his GSI job, he tutors for the campus Academic Service Center and volunteered at Berkeley High School, helping local teenagers. He recently lobbied the BioE department to start a peer advising and tutoring program, which now features four volunteers helping their fellow majors. And this tutor can jive; Fei dances with a local swing troupe.
BUGS TO BLOOD: A team of Cal undergraduates, including BioE students, demonstrated how genetically modified E. coli bacteria might be converted into a cheap and safe blood substitute. The engineered product, called “Bactoblood,” addresses a global shortage of human blood for transfusions.

RECORD RESEARCH: EECS senior Henry Wang is helping to restore valuable recordings for Project IRENE, which is preserving collections of music, speeches and other audio recordings for the Library of Congress.

BALANCED: CEE senior Elyse Wong performs a floor exercise routine, one of many during her four-year career with the Cal Women’s Gymnastics team.

DATA SHARING: ME junior Nancy Huynh helps a young participant build a mini rocket at “Engineering for Kids Day,” a new, undergraduate-led outreach event to introduce engineering to children.

KEEN EYE, STEADY HAND: ME junior Keaton Chia hopes to compete in the 2012 Olympics. Chia is captain of the Cal Archery team.

REFLECTING SUCCESS: In July, EECS Ph.D. student Donovan Lee (with wafer) received the “Best Student Paper Award” at the 2007 International Symposium on VLSI Technology, Systems and Applications.

IMETERS TO SPARE: ME freshman Dylan Brown checks how well a driver fits in the frame of Cal’s formula-style, small-scale race car. The race car team is steering for a top 10 finish this June at the Formula SAE West competition.
Celebrating the life of Chris Wootton

As the Class of 2008 prepares to graduate, our engineering community honors the memory of NE senior Christopher J. Wootton, who was killed during an altercation near campus on May 3. Wootton’s academic accomplishments were many: a 3.8 GPA; membership in Tau Beta Pi, the national engineering honor society; research at Lawrence Berkeley National Laboratory; and acceptance in NE’s graduate program, researching nuclear materials with associate professor Brian Wirth.

But Wootton found more than just academic success at Cal. He found brotherhood in the fraternity Sigma Pi, where he served as an officer. He found truth in his Christian faith, where he took part in Bible study groups. He found love and friendship in his personal relationships, where he connected with so many people.

“Time has flown by ridiculously fast,” he said, when asked to look back on his Berkeley experience. “I still remember the first days of class as a freshman, where everything seemed so much larger than me. I never thought I would be able to surmount it all; but I have and look forward to the future opportunities that have resulted.”

Wootton will be honored at the College’s Commencement ceremony.

Eighteen things I’ve learned in the past four years

By IEOR senior Audrey Fischer

1. Dance to your iPod music on the way to Etcheverry.
2. Wear sunscreen. SPF 15 at least.
3. Never, ever, be afraid to ask for help.
4. Remember the past and future don’t exist — they only exist as thought.
5. Show up late to linear programming class rather than not at all.
6. Exercise. Your mind and body will thank you.
7. Remember life is five percent what happens and 95 percent how you react.
8. Spend at least one sunny afternoon at the Berkeley Marina.
9. Know that you can plan to take action in the future, but genuine action can only be taken NOW.
10. Do your engineering problem set ahead of time.
11. Then go to office hours.
12. Visit Bakesale Betty’s on Telegraph and 51st.
14. Don’t concern yourself about what others think about you. That’s their business, not yours.
15. Live beneath your means.
16. Make friends with the person next to you in physics class. You’ll both be grateful.
17. Laugh. Most important, laugh at yourself.
18. Remember that you can keep going long after you can’t.
Graduates Of the Last Decade program keeps you connected!

Whether you’re off to graduate school or to start a new job, the College invites you to remain in touch with your new community, the Berkeley Engineering GOLD community, or Graduates Of the Last Decade.

“GOLD offers young alums the chance to stay connected with the College and with each other,” explains Misha Leybovich (B.S.’05 Eng. Physics). “We live and work in an increasingly networked world, and the relationships we maintain enrich our lives through friendships and career connections.”

Get involved in these ways:

FUN EVENTS: For Bay Area alumni, GOLD offers activities such as happy hours, speed networking and sea kayaking with Cal Adventures. Meet up with old friends, make new ones and network!

BEYOND BERKELEY: Expand the GOLD program and become a liaison for your local area. The college wants to build local GOLD community groups across the country; a few key areas include the Bay Area, Southern California, Illinois, Massachusetts, New York, Texas and Washington State. Be a part of this effort!

GIVE BACK: The College always appreciates alumni who make charitable contributions to the Berkeley Engineering Annual Fund and who encourage others to do so. The fund supports student leadership opportunities, undergraduate research programs, student resources and much more. Compete against other classes in the GOLD Challenge; it’s not how much you give but that you give. Your participation is essential!

“We want to make sure that the next generation of students has the same awesome experience that we recently had at Cal,” says Leybovich. “We also want to be sure that our degrees continue to mean something, and that’s contingent on the College’s continued excellence.”

Over 50,000 Strong: As a new graduate, you are now a member of the Berkeley Engineering Alumni family, a community of more than 50,000 graduates all over the world, including such luminaries as Apple co-founder Steve Wozniak and astronaut Leroy Chiao. You can stay in touch in many ways: read our biannual Forefront magazine, submit a class note, visit us at Homecoming and say hello to your favorite professor, mentor an engineering student, recruit students to your workplace, or volunteer at Cal Day and share your insights with prospective students, to name a few.

Welcome to the Berkeley Engineering Alumni family!
Q&A: What's your reaction to graduating from college? What will you remember most about Berkeley and your time here?

Zorigt Bazarragchaa, EECS
Hometown: Hayward, California
Plans: Work in the field for a couple of years, go to graduate school, then a startup company.
“I found the most important thing, and it was discovering myself.”

Jean M. Parks, CEE
Hometown: Westlake Village, California
Plans: Working on my Ph.D. at the University of Colorado at Boulder this fall.
“I feel an incredible sense of empowerment to become whatever I want and the freedom to choose the path I take. I will always remember the smell of the stairway in Davis Hall and to be proud of my Berkeley education.”

Albert M. Aumentado, MSE
Hometown: Santa Barbara, California
Plans: Hoping to do a research internship and work in industry and travel, then later graduate school.
“I realized something: People are people. I am an engineer. Others will leave here as physicists, chemists, mathematicians, pre-law and what have you. And for much of my time at Cal that is how I viewed the student body. But now history, astrophysics, English majors… They are not just faceless students. They are my friends.”

Adrienne Blair Little, ME
Hometown: Belmont, California
Plans: Graduate school at Georgia Tech to study renewable energy.
“I'll remember running out of the north tunnel of Memorial Stadium for the marching band’s pregame show.”

Mactarun Malik, ME
Hometown: Chino, California
Plans: Systems Engineer for VI Technology in Mountain View.
“I will remember my college experience as not only a journey where I grew in the academic realm but the social realm. Where a young teenage boy developed into a compassionate, ambitious and educated young man. Where my blood turned blue and gold. GO BEARS!!!!”

Maxwell A. Feinglass, CEE
Hometown: Chicago, Illinois
Plans: Stay in the Bay Area and look for work.
“Existential crisis and the end of childhood.”

Whanwook Chang, BioE
Hometown: Daejeon, South Korea
Plans: Graduate school at Boston University in bioengineering.
“I will be sure to remember the effective and rigorous discussions with TAs and professors as well as with my peers.”

Adeeti V. Ullal, BioE
Hometown: Saratoga, California
Plans: Ph.D. candidate in medical engineering/medical physics at Harvard-MIT (Health Science and Technology Division).
“I can’t believe this four-year journey is ending! My favorite part about campus is that it is so filled with life. From Zellerbach performances to Sproul during elections to dance and singing showcases, you can never be bored.”

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