UC San Diego News Center

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\$2 million Gift from Alumnus Supports Computer Science Undergraduate Engineering Education



Photos by Erik Jepsen/UC San Diego Publications

A \$2 million gift from a University of California, San Diego alumnus will provide critical support for undergraduate education in the Department of Computer Science and Engineering. The funds will help recruit, retain and support the professors and lecturers whose primary mission is to teach and mentor students.

"This gift goes to the heart of our mission: to transform the lives of our students through an exceptional educational experience provided in the classrooms and laboratories at UC San Diego. It's extremely gratifying when an alumnus draws on the success achieved after

graduation to ensure that the next generation of leaders and innovators will share all that we have to offer," said Chancellor Pradeep K. Khosla.

"Today, we are celebrating our ability — thanks to this gift— to make a financial commitment to recognize the educators who engage and inspire our students," said Rajesh Gupta, chair of computer science and engineering at the UC San Diego Jacobs School of Engineering.

Paul Kube Honored as Computer Science Educator

<u>Endowed chair created in Kube's name at UC San Diego</u>

The gift comes at a time of tremendous growth for the computer science department, now the largest in the University of California system, with close to 2,200 undergraduates enrolled as of fall 2014. The department is currently ranked 7th in the United States and 11th in the world, according to U.S. News and World Report.

"I want to give the Department of Computer Science and Engineering at UC San Diego the resources it needs to teach students and the ability to serve as many aspiring students as possible," said Taner Halicioglu, the computer science alumnus who gave the generous \$2 million gift. "These teachers truly inspire students."

Half of the gift will go to establish UC San Diego's firstever endowed chair for a teaching professor. The other half will go to attract and retain the best lecturers, allowing them to engage more with students, mentor them and develop new courses and programs.



"We are working hard to engage all of our undergraduate computer science and engineering students in hands-on or experiential education, starting in their very first year," said Albert P. Pisano, dean of the UC San Diego Jacobs School of Engineering. "I am sincerely grateful for this gift. It will help our computer science educators innovate in their classrooms and teaching labs."

Gift from an alumnus

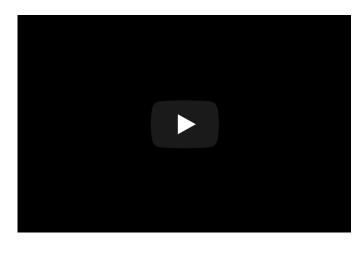
It was a lecturer who left the greatest impression on Halicioglu when he was an undergraduate majoring in computer science. He graduated from UC San Diego in 1996 with a Bachelor of Science and a passion for systems and data science. The lecturer was Keith Muller, and he was

working at ATT Labs while teaching here on campus. "He always had an anecdote from his work life about why you wanted to know what he was teaching you," Halicioglu recalled. "I remember a good portion of the students stayed after class and talked to him."

Muller, who is now a Fellow and lead architect at Teradata, inspired Halicioglu to come back and teach in the department. Halicioglu currently teaches an undergraduate seminar in computer operations and production engineering, where he imparts some of the wisdom he's gained over the years working in the tech industry. His resume includes stints at eBay, Facebook and Blizzard Entertainment, the popular video game company that created World of Warcraft, StarCraft and Diablo.

The purpose of the gift

The Department of Computer Science and Engineering at UC San Diego is home to 51 faculty, including four teaching professors, whose research focuses on computer science education rather than on a specific discipline of computer science. The gift funds a new \$1 million endowed chair, named after retired teaching professor Paul Kube, to add a fifth teaching professor. It will be used as a recruiting tool to hire a teaching superstar, Gupta said.



"This gift allows us to attract phenomenal teachers to our ranks—excellent teachers from anywhere in the world," Gupta said.
"The market for teaching talent is extremely competitive. With the distinction that this new endowed chair affords, we hope we can tip the scales in our favor in attracting that talent."

In addition, Halicioglu said he wanted to give renowned and well-liked lecturers the ability to devote part of their time to activities beyond classroom teaching, such as

mentoring students, training tutors, and developing new courses and programs. The gift establishes a \$1 million endowment fund that will pay for at least two distinguished lecturerships each year. The lecturerships will be named at a later date. The lecturerships will relieve their recipients of teaching one course per quarter. The recipients will then have more time to focus on mentoring students and refining innovative teaching techniques in their classrooms.

"Lecturers are our front line, the first educators many of our entering students interact with here on campus," said Gupta. Many of them teach the department's large introductory classes for freshmen and sophomores. There are three permanent lecturers in the department, who are popular with students, and a cadre of about 20 temporary lecturers who teach many of the department's introductory classes for freshmen and sophomores.

"Here at UC San Diego, in the computer science department particularly, we have set up lecturers that are relentless about investing in their students to make sure that they succeed," said Nikolai Devereaux, a member of the department's alumni board. "I think computer science is a very challenging discipline. It's very easy to give up hope. It's very easy for a student who may be on the fence to think that maybe they're not good enough, not smart enough," he said. "What the lecturers are really great at doing is working with students to inspire them to believe that they can do well."

The tutor program

The lecturers build connections with undergraduates in many ways, but especially through the department's tutor program. The department now hires nearly 1,000 tutors every year, and many are returning students who have tutored before. Tutors are stationed in undergraduate labs, where they provide one-on-one and small-group mentoring. Students in introductory classes get help at crucial moments, just when they need it. In turn, tutors develop marketable leadership and teaching skills, and the entire department benefits from a stronger sense of community. Teams of tutors also get together to grade exams, providing students quick feedback on their performance.

"We're in a very small group of universities who are tapping into this great resource, both helping the students and, in the process, creating leaders out of the students who are doing well," said Gupta.

Jennifer Arguello, now a senior tech advisor for the Kapor Center for Social Impact and a member of the computer science department's alumni board, started tutoring her second quarter at UC San Diego.



In her senior year, she led her own discussion section. "There I was a couple of times a week in an actual lecture hall with probably about 100 or so students. And they were mine, you know. They were my responsibility," Arguello said. She added she hoped she was a role model for

some of her students. "Just by me being up there and being a woman, and a Latina, a woman of color, maybe I inspired other women in the class to stay with it."

Tutors share a strong sense of community, which doesn't go away after they graduate, she said. "The alumni of the tutor program never forget the tutor program," Arguello said. "And they don't forget their wallets either. They give back."

Gupta said he hopes the gift will be the first of many that alumni make to honor their teachers in the computer science department, and in other departments as well. "This puts the student-centered mission of the university front and center," Gupta said.

The Jacobs School of Engineering offers a variety of ways to support the Department of Computer Science and Engineering. Please consider giving online to the CSE Engineering Tutor Program or the Paul R. Kube Chair of Computer Science. Honor your favorite teacher when you donate to the CSE Teaching Endowment Fund.