

COSMOS Alumni:

This is your news-letter, so let us know what you want to see! Send us your updates, your accomplishments, your photos, anything you'd like to share with your fellow alumni!

COSMOS Director,
Dr. Charles Tu

COSMOS Outreach;
Popular Science Awards

COSMOS iPads;
Cluster 5;

Faculty Update:
Dr. Robert "Skip"
Pomeroy, Cluster 6

COSMOS Alumni
Rasheed Al Kotob,
Quan Ly, Israel
Barbosa, Gabriela
Bernaldino and
Rocio Pena

*Send us your photos or
story for the next issue!*



Contact us:

Visit our website:

Interest in attending the COSMOS program continues to grow every year, and this year was no exception. 545 applications were completed for 164 student openings. Faculty have difficulty choosing between all the highly qualified applicants-what an amazing group of students! The accepted students tend to be older (more 11th graders), mostly from California (three out-of-state attending), equal in gender (M/F) and 43% are receiving financial assistance. The most requested first choice clusters were

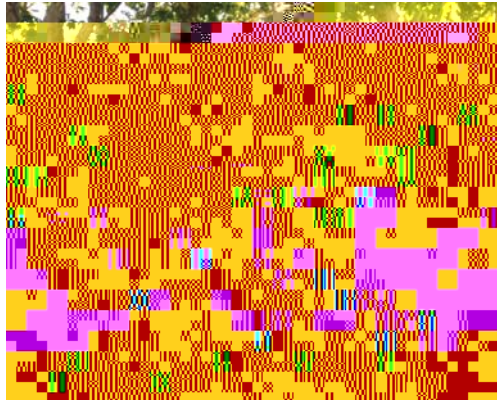
Important Upcoming Dates

Tuesday, January 21 - Friday, February 21


UCSD, UCD, UCSC—July 7-August 2
UCI—June 29-July 25

Send your news and updates to
cosmos@ucsd.edu

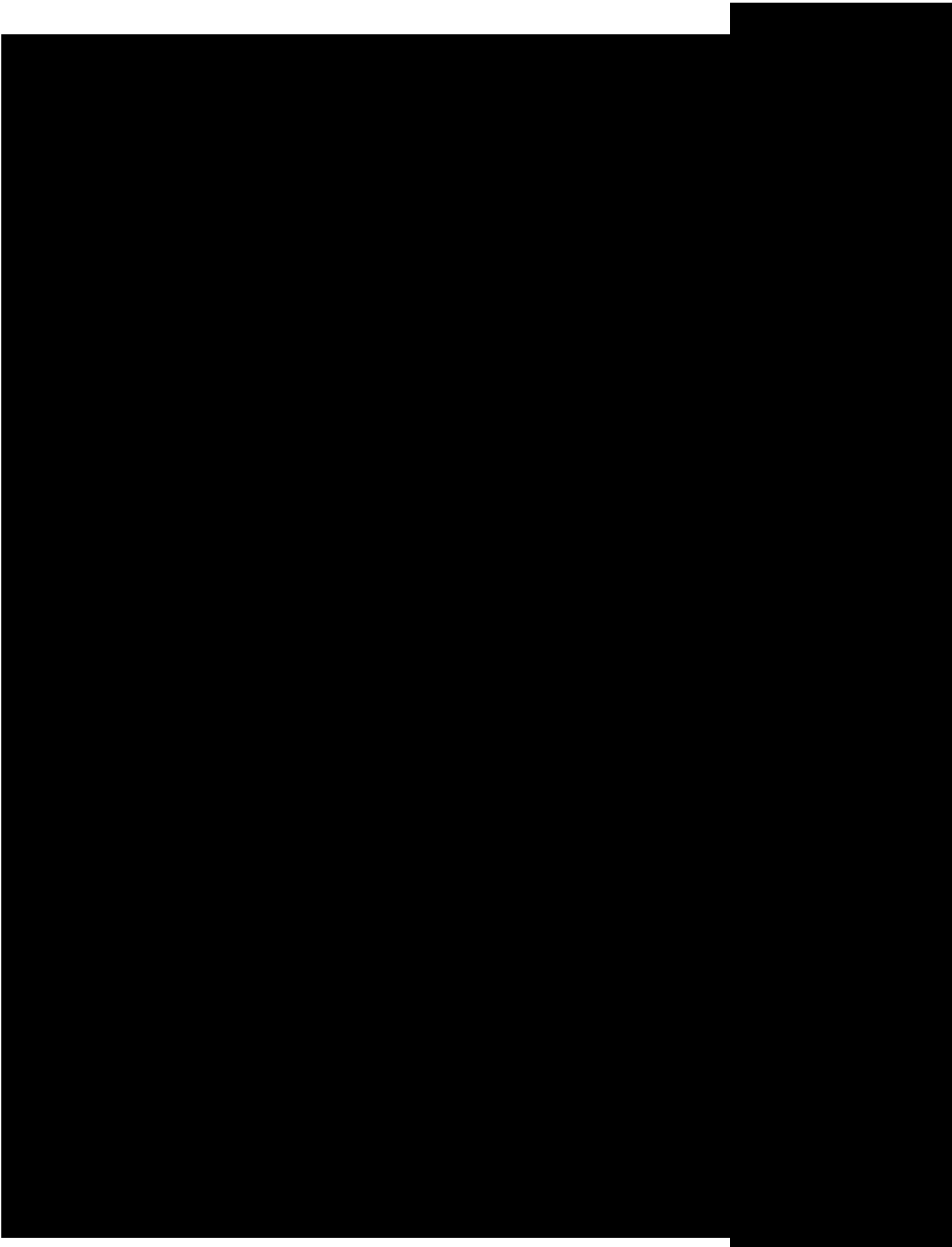
Dr. Tu has been extra busy lately! He recently stepped down as the Associate Dean of Engineering at the Jacobs School of Engineering at UCSD, has been on sabbatical this fall in Taiwan and will return to teaching electrical engineering in



The biggest outdoor shake table in the world and a robot designed to move along utility lines have received “Best of What’s New” awards from *Popular Science*, the world’s largest science and technology magazine. The large, high performance outdoor shake table, a popular Cluster 4 field trip, can handle structures weighing up to 2200 tons without height restrictions. The table’s powerful hydraulic actuators—piston-like devices—can move at up to six feet per second, creating realistic simulations of the most devastating earthquakes ever recorded. SkySweeper, designed in the Coordinated Robotics Lab is a robot made of off-the-shelf electronics and plastic parts printed with an inexpensive 3D printer. The prototype could be scaled up for less than \$1,000, making it significantly more affordable than the two industrial robots currently used to inspect power lines. “The Best of What’s New” award is the magazine’s top honor, and the 100 awardees are selected from a pool of thousands,” according to Cliff Ransom, Executive Editor of *Popular Science*. “Each winner is handpicked and revolutionary in its own way. Whether they’re poised to change the world or simply your living room, the “Best of What’s New” awardees challenge us to see the future in a new light.”

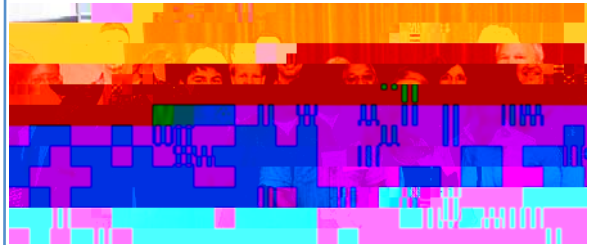


students that can struggle with technical subjects in college." The app was inspired by the research of Sheryl A. Sorby, a professor at Ohio State University. Sorby realized that many women, herself included, did not initially have strong spatial visualization skills. She developed a course on spatial visualization and showed that students who took her course not only became better at visualizing objects in 3D, but also got better grades in math, physics,





Quan Ly, Cluster 2, COSMOS 2011 and Brandon Kuu, Cluster 2, COSMOS 2010, attended the UCSD Chancellor's Dinner in June 2013. Pictured are Quan Ly and Charles Tu, Director, COSMOS UCSD



Israel Barbosa, (COSMOS 2011, C6: Exploring the COSMOS) was one of five UCSD undergraduate students, along with two junior faculty members, awarded a tech-

Keep in touch! Look for our next issue in Spring 2014!