Hello from the ECE Department

As the year nears its end, we look back with pride at a period of unprecedented growth in the Department of Electrical and Computer Engineering at UC San Diego. Over the last two years, we welcomed eight new faculty members to ECE; this brings our total faculty count to 56.

Part of this growth is in our undergraduate programs that build on strong theoretical fundamentals while complementing this knowledge with courses and programs that provide hands-on applications. With the addition of several new courses, a new maker facility, and extracurricular activities, we are creating a multi-faceted curriculum with threads that extend throughout the entire undergraduate experience.

We also celebrate the achievements of our graduate students, we are eager to share our recent efforts to expand activity in the areas of robotics, nanoelectronics, adaptive computing and embedded systems, big data, flexible electronics, signal processing and machine learning. Our new faculty have strong systems backgrounds in diverse research areas and are instrumental in our efforts to create a robust hands-on experience for our students. More details can be found at our annual ECE brochure here.

We invite you to explore the work and accomplishments of ECE faculty and students featured in this newsletter.

Sincerely,

Truong Nguyen, Chair
Kevin Quest, Vice Chair

Announcing the New ECE Website

ECE is proud to announce the launch of our newly redesigned website ece.ucsd.edu. The primary objectives of our site were to focus on traffic flow, aesthetic, content simplification and an overhaul of our brand to realign with the campus look.

Explore our site and take a look at all of our new programs and not the older ones. Find out about how classes have changed as well as lab spaces. Also, take a look at our new alumni pages and find out new ways to keep in touch.

We look forward to your comments and hope that you enjoy perusing your alma mater.

Welcome New Faculty!

We are proud to introduce our new ECE faculty this year, Assistant Professor Nikolay Atanasov, Assistant Professor Piya Pal and Professor of Practice, Todd Hylton.

Hands-On Curriculum
UC San Diego showcases real-world applications of research at Maker Faire

Maker Faire is an all-ages gathering of tech enthusiasts, tinkerers, educators, inventors, hackers, engineers, science clubs, artists, activists, students and many others. The faire is part of the broader Maker Movement, a week-long series of events showcasing innovation to the Cali-Baja region, and has become part of popular culture — a place for experimental marketing, debuting new technologies and inventions and celebrating geniuses of every stripe.

Researchers from UC and the Jacobs School exhibited their work or visited throughout Balboa Park. ECE showcased its hands-on curricula: ECE 5, ECE 16, ECE 115, and ECE 196. The attendees had fun trying out various projects as well as playing with the global pinball machines designed in ECE 115.

2017 Design Competition

The objective of the last annual design competition is to design a device or platform that improves the quality of life for senior citizens. Students have been attending monthly update meetings led by the Design Competition Committee. At the most recent meeting in October, 2016, teams shared a brief presentation on their interactions with senior citizens thus far, problems they identified and would like to solve, and initial product ideas.

There are 20 teams total, with about 80 students participating. The students are from a variety of departments: ECE, Log bc, CSE, BioInformatics, Biology, Architecture, Psychology, Environment, EE, and Mathematics.

Two meet & greets with senior citizens took place: one on campus with members of the UCSD Retiree Association; the second at La Costa Glen Community in Carlsbad. Some students have also scheduled time on their own to talk with senior citizens, such as lunch at the Faculty Club, which they are allowed to do as long as they are students. Professor Nguyen. A third meet & greet is scheduled for the January on-campus.

Moscardi, a sponsor of the competition, is hosting a workshop on January 17th for students who would like to learn how to use their hardware.

The final proposal is due January 30th, and the final presentation, including demonstration, is scheduled for the Design Competition, Saturday, January 30th, 2016. See the competition's newsletter.

For more information [here](http://ece.ucsd.edu/)

Summer Research Internship Program

The ECE Department is very pleased to announce an exciting new Summer Research Internship Program (SRIP) for continuing ECE undergraduate and MS students. This new program will launch in the summer of 2017 and will fund 50 undergraduate and 10 MS students. It is a 10-week program that runs from July 3rd through September 8th, 2017.

ECE Summer Research Internships will be in labs where interns will have the opportunity to observe and participate in the research activities of a research group under the supervision of either a Ph.D. or senior member of the research team. The program includes an enrichment component for students consisting of workshops on research methodologies, research writing, and other pertinent topics. In addition, students are required to present their work at the Summer Research Conference on August 17th, 2017. Research interns selected for this program will receive a summer stipend in the amount of $5000.

For more information on the summer research internship program for graduate students, please visit [here](http://ece.ucsd.edu/)

Support Your School

We need to thank you, our donors, for your gracious continued support. Please consider us for your 2016 charitable donation.