

COMPUTER SCIENCE AND ENGINEERING @ UCI

Jointly offered with The Henry Samueli School of Engineering



>>> WHAT DID YOU LEARN?

MY COURSES HAVE INCLUDED:

Computing Tools for Computer Science and Engineering

I programmed Newton's method for polynomial roots and used it to make fractal images.

Electronic Devices and Circuits

I learned how to design transistor circuits, including amplifiers and digital logic.

Digital Signal Processing Design and Laboratory

I designed equalizers and filters for classic rock music and built an echo-canceling filter in the lab.

Embedded Computing Systems

I built a microprocessor-based digital piano with keypad, LCD and a speaker.

Senior Design Project

Relying on the skills developed in my previous classes, I took part in a multi-quarter project to build a remote-control hovercraft.

Introduction to VLSI

I designed a "ripple adder" arithmetic circuit from scratch.

>>> WHO ARE YOU?

* I am a persona based on UCI students majoring in Computer Science and Engineering.

My name is Krishna, and I grew up in San Diego. I chose this major because I wanted an equal balance of hardware and software in my coursework.

I'm particularly proud of a recent class project. Our professors really encouraged us to do something that has never been done. I worked with three other students to create an automated solution to a labyrinth board game using image processing and the OpenCV libraries. We also utilized an Arduino to physically move a metal ball around the board, using servos and a Nintendo Wii Nunchuk controller.

Last summer I interned with Canon, which was developing its own line of HDTVs. I researched several ways of designing the user interface and documented my findings for the Japan office. I also served as a residential advisor for two years in Middle Earth housing, which helped me grow as a person. Being able to help freshmen adapt to college life made me feel like I was part of something important.



www.ics.uci.edu/prospective

>>> POSSIBLE CAREERS

- // With a degree in Computer Science and Engineering from UCI, you might work as a product manager for iRobot, developing exploration strategies for robots so that rescue workers can save people's lives after an earthquake.
- // You could become an embedded software engineer with Samsung, designing firmware for solid-state hard drives so that laptops are faster and have longer battery life.
- // Or you might get a job as a systems engineer, working with GE to develop wireless networked sensor systems for health care monitoring, to help lower health care costs and provide better, more efficient care.

>>> BREN:ICS STUDENT SOUND BITES



“I really enjoy the upper-division Algorithms classes. I like working on challenging problems and examining in detail the mathematical concepts behind theories and their proofs. Outside of classes, I have gained research experience developing a telescope control system to identify stars. I've also interned at a telecommunications firm, analyzing network security. I've been accepted to the M.S. program in ICS for next fall, but I'm still deciding whether to work as a software engineer.”

—ANSON

“Last summer I worked at Intel Corporation in Irvine as a technical engineering intern. I was assigned to the pre-silicon validation team and was responsible for reading the specifications, writing requirements and validating some portions of the project. For fun, I play basketball and have also learned how to throw and catch a boomerang. As a Bren:ICS Student Ambassador, I've had the opportunity to help plan and host events for both current and prospective students.”

—CHRISTOPHER



“The variety of subjects and courses, along with the requirement to complete one of four specializations, gives CSE majors a strong advantage when we enter the job market. We can pursue employment opportunities in diverse areas, ranging from embedded systems to artificial intelligence, and any number of other established or developing fields.”

—MUHAMMAD (AKA MO)



>>> MORE INFO

Not sure Computer Science and Engineering is the right major for you? Check out our complete degree programs listing at www.ics.uci.edu/prospective/degrees-overview. We offer several minors as well.

Have questions for one of our counselors? Call the **Student Affairs Office** at **949-824-5156** or email ucounsel@uci.edu.

Ready to apply to UC Irvine? Visit www.admissions.uci.edu.