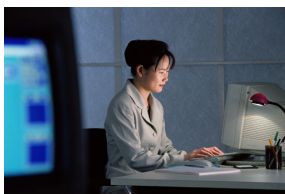


## After Graduation

Computer science graduates can choose to go begin a career, or they can continue their education in graduate school. For those entering the workforce, there are many types of positions to choose from in just about all industries. Computer scientists work in software development, technical support, software project management, system and network administration, education, and research, just to name a few. Some work for companies whose primary product is software (a company that develops tax software, or one that develops game programs, to name a couple examples), while others work for companies that do not sell software, but whose products include software (for example, a wireless communications company or the maker of high tech medical equipment). It is an exciting time to be a computer scientist, as software is everywhere.

For those graduates who are interested in research, going on to graduate school is a natural choice. Our students have been accepted to some of the top computer science graduate programs in the country, such as the University of Washington, the University of Wisconsin, UCSD, and UCSB.



### Department of Mathematics & Computer Science

#### For more information:

Visit our department website at  
<http://www.sandiego.edu/cas/math-cs/>

Or email  
Dr. John Glick, Computer Science Program  
Coordinator, at [glick@sandiego.edu](mailto:glick@sandiego.edu)  
Dr. Simon Koo at [koo@sandiego.edu](mailto:koo@sandiego.edu)  
Dr. Eric Jiang at [jiang@sandiego.edu](mailto:jiang@sandiego.edu)

We'd love to hear from you!



## Computer Science Program



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Department of Mathematics  
and Computer Science

## Consider Computer Science as Your Field of Study

Computer science majors study the theory and practice of designing software. As the use of electronic devices (including general purpose computers) becomes more and more widespread, the need for computer scientists to develop the software that controls them and runs on them also grows. It is not the case that you have to have spent a lot of time using or tinkering with computers (or programming them) to consider computer science as a major. Many of our best majors had no programming experience prior to coming to USD, and they are now enjoying rewarding careers in the field. If you have a logical, organized mind, and if you enjoy problem solving, then consider exploring computer science as your field of study by enrolling in Computer Programming I.

### The Computer Science Curriculum

USD's computer science curriculum is designed to give students a breadth of knowledge covering the major areas of computer science. In their first two years of study, students take a traditional introductory course sequence in programming, problem solving, and data structures, as well as courses in mathematics and the fundamentals of computer architecture. The advanced courses that our students take deal with diverse topics such as operating systems, analysis of algorithms, databases, computer graphics, software engineering, computer networking, high performance computer architectures, and theory of computation.



### Computer Science at USD

Majors in computer science at USD enjoy the benefit of a fine technical program as well as the advantage of a liberal arts curriculum and environment. Our class sizes are small – introductory classes have no more than 25 students, and upper division classes have no more than 20 students. Small classes allow for frequent interaction between students and faculty – inside and outside of the classroom – and for the development of a close network among fellow computer science students. This environment greatly facilitates students developing the skills necessary for them to succeed in computer science. Here's what some of our students have to say about computer science at USD:

"The professors are always there to help you, even if you're not necessarily taking a class with them at the time. The classes are small, so you get to know everyone really well, and we all help each other out if we have a problem. It's great!"

. Alessa Ellefson, class of 2005, Hometown: Carlsbad, CA

"Professors here at USD are more like advisors, they always have time to discuss your worries, plans, questions and ideas. You are never on your own."

. Yael Schwartzman, class of 2004, Hometown: Mexico City, Mexico

"Most students get jobs at restaurants or as tutors for \$7.00/hr while they're in school. Thanks to USD's CS program, I was developing radar and missile software for the US Navy for more than \$20.00/hr."

. Andrew Putnam, graduate 2003, Hometown: Colorado Springs, CO, currently pursuing a PhD at the University of Washington

### Opportunities Outside the Classroom

Many of our junior and seniors choose to supplement their computer science coursework with internships in industry. The San Diego area has many high tech companies in fields such as software, wireless communications, and defense, and our students have been quite successful in finding internships with them. In their internships, students typically work anywhere from 10 to 20 hours per week, gaining valuable experience that helps them decide the area of computer science they would like to pursue upon graduation, and that helps position them to be competitive when searching for a job.

Some of our students choose to learn about research in computer science, either by working with a faculty member on a project, or by being accepted into an externally run undergraduate research program. Our computer science faculty have active research programs, giving our students different possibilities for doing research projects during the school year as independent studies or during the summer as funded USD SURE (Summer Undergraduate Research Experience) projects. Some students choose to pursue outside research opportunities, and we are particularly proud of those who have been accepted into competitive NSF sponsored summer REU (Research Experience for Undergraduates) programs. All of these research experiences are very valuable for students considering attending graduate school.

