WHAT IS
COMPUTER SCIENCE?

Computer Science is a combination of logical thinking, problem solving, mathematical reasoning and creative software/hardware engineering.
The University of Texas at Austin Computer Sciences Department (UTCS), **the largest top-ten computer science department* in the U.S.**, teaches fundamental concepts first, followed by opportunities to learn about many other areas of computer science. A computer science education begins with learning to think abstractly about a variety of different types of problems. Computer scientists then formulate computational solutions to those problems using a range of logical, mathematical and software design skills. Students learn how computer software, hardware and networks are combined to solve complex problems in both scientific and practical fields. Computer scientists are responsible for the rapid pace of innovations in technology, medicine, communications, commerce, human interactions and physical sciences that we see today. Contrary to what you may think, it is a social and collaborative field, and computer scientists have the opportunity to work with bright people and spend a lifetime being challenged and rewarded by the profession.

*U.S. News and World Report, 2006

Left: UTCS undergraduates under Associate Professor Peter Stone are working with Austin Robot Technology to build a self-driving car for an international robotic competition.
*Right: Ryan Madigan, student team member, tests the car.*

UTCS
CLASSES & RESEARCH

The Classroom. UTCS undergraduates may choose from two degree plans, Bachelor of Arts and Bachelor of Science. Both degrees provide instruction in the foundations of computer science — data structures and languages, computer architecture and systems, and formal methods or logic. Students choose from a variety of electives in areas such as: networking and wireless technologies, graphics and game technology, theoretical computer science, security and cryptography, and artificial intelligence and robotics.

Research. The Freshman Research Initiative encourages first-year students to participate in research such as Nero Game (*www.nerogame.org*) and Autonomous Vehicles (*www.austinrobot.com/cms/*). After the first year, students can work in a research group, write an honors thesis or create an independent project under the guidance of a faculty member.
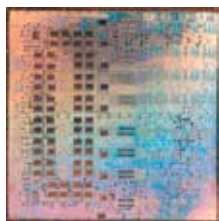
Left: The TRIPS processor prototype.
Right: Franzi Roesner, a UTCS undergraduate, and Associate Professor Doug Burger discuss Franzi's research work on a segment of the TRIPS processor, a high-speed prototype processor the department is developing.
www.cs.utexas.edu/~trips/
Photo UTCS, Scott Sutcliffe

Photo UTCS, Carol Grosvenor

TURING SCHOLARS
HONORS PROGRAM

The Turing Scholars Honors Program provides a stimulating environment for highly motivated CS students seeking intellectual challenges. The program leads students through an engaging series of honors courses, culminating in an honors research thesis that allows students to work closely with world-class faculty. The program also provides a supportive community that includes social events and dedicated advising. The quality and reputation of this program has opened the door to numerous student opportunities, including scholarships, research positions, internships and jobs. The Turing Scholars program prepares students for the nation's top graduate schools such as UC Berkeley, Carnegie Mellon, MIT, Stanford and UT Austin. Students with a strong interest in math and science—even those without solid CS backgrounds in high school—are encouraged to apply to the program as part of their UT application. For more information visit the CS web site (*www.cs.utexas.edu*).

Right: Turing Scholars, Tarun Nimmagadda and Mickey Ristroph, discuss their new business with Sarah Chandler at Gregory Pool on campus. The business was launched by winning a UT entrepreneurship contest which provided $50,000 in seed money and the university as a first client.

Photo UTCS, Carol Grosvenor

Photo UTCS, Carol Grosvenor

WHAT MAKES UT AUSTIN AN
ELITE UNIVERSITY?

Cutting-edge research, brilliant professors, top students and great sports for starters. *The Times of London Higher Education Supplement (2004)* ranked UT the **15th best university in the world** and **9th in the U.S**. The University of Texas at Austin attracts brilliant professors who are both accomplished teachers and world-renowned leaders in their professions. Students may take a wide variety of electives and/or double or triple major. CS majors may also participate in multiple honors programs including Turing Scholars (Computer Sciences), Dean Scholars (College of Natural Sciences) or Plan II (Liberal Arts). UT offers students tremendous opportunities to attend cultural events, participate in intramural sports, join a student organization (there are more than 900) and cheer for a favorite sports team. Being part of a community where everyone strives to be the best in their field is exhilarating. There is truly something for everyone.

Left: Longhorn Hands.
Right: An Aibo robotic dog, used in artificial intelligence research, escaped from the lab and was seen strolling on the lawn.

Photo courtesy of The College of Natural Sciences, David Steadman

Photo UTCS, Carol Grosvenor

WILL UTCS HELP ME FIND
INTERNSHIPS & JOBS?

Austin. San Francisco. Dallas. Houston. New York. San Antonio. London. Your hometown.
The question isn't if you will be employed, but where. Computer scientists are in high demand in every field and more than 100 companies recruit aggressively from UTCS. Most students have at least one internship during college and it is the best way to find future employment in such fields as medicine, gaming, energy, finance, internet, security, business, transportation and defense. Career counselors and Friends of Computer Sciences companies (*www.cs.utexas.edu/oea/focs/*) host on-campus recruiting events to help students find internships and full-time positions. UTCS graduates currently receive salary offers ranging from **$55,000 to $80,000,** depending on the type of job and region of the country. With a CS degree you will be able to work and live almost anywhere you choose.

Left: UTCS student speaks with a National Instruments recruiter at the Career Fair.
Right: Ariel Apostoli, undergraduate, talks to a corporate recruiter about an internship at the annual Scholarship Luncheon, where industry affiliates meet UTCS students in a relaxed setting. Ariel has had two internships with Google.

WHAT IS IT LIKE TO LIVE IN
AUSTIN, TEXAS?

Austin — A city with heart and soul. Austin consistently ranks among the top U.S. cities in quality of life surveys from companies like Forbes and Yahoo — best for singles, most highly educated, best job market, best work-life balance and best place to start a business. "Austin is just simply not like the rest of Texas. From the quirky cast of characters that populate Congress Avenue to burnt orange-clad University of Texas students, from bats to Longhorns, four-star restaurants to down-home barbecue joints, corporate CEOs to struggling musicians, Texas' capital city stands apart from the rest. It's hip and trendy, yet in a vintage sort of way. It's high-tech and laid-back. It's politically charged and culturally rich. It's eclectic by nature and creative by design. Most of all, it's a place where people like to have a good time."

— *Austin Convention and Visitors Bureau*

Left: Kayakers on Lady Bird Lake.
Right: Massive Attack performing at the Austin City
Limits ACL Concert. The abundance of live music is
a big part of what makes Austin such a great place to
live.
Photo courtesy of TxDOT

Photo courtesy of Austin City Limits

GET THE FACTS ON YOUR UTCS
COLLEGE CAREER.

Rankings and Value. The *Fiske Guide to Colleges* and *The Princeton Review* rank UT Austin in the top 30 best higher education values factoring in the institutions' academic quality with the cost of attendance. *U.S. News and World Report* (2006) ranks the Computer Science department in the top ten U.S. computer science departments, including the Ivy League Schools.

Admissions. http://bealonghorn.utexas.edu/. Visit the **Be a Longhorn** web site for all freshmen admission information. Even though university admission is guaranteed to the top 10% of Texas public high school graduates, you must apply using the standard ApplyTexas Application. Select Entry-Level Computer Sciences in the College of Natural Sciences as your first choice major. Deadline for fall admission applications is February 1. Acceptance is based on a combination of high school grades, class rank, SAT/ACT scores, the admissions essay, resume and recommendations. The average SAT and ACT scores for incoming CS freshmen in 2006/7 were 1258 and 26.

Costs. The current cost (2007/8) of in-state flat-rate tuition in the College of Natural Sciences is approximately $4,000 per semester. For non-residents entering UT after 2006, the cost is about $13,000. Total cost of tuition, books and living expenses for a year is estimated at approximately $21,000 in-state and $39,000 out-of-state.

Scholarships. Students may compete for college, departmental and corporate scholarships. Apply for scholarships after you've applied to the university through separate applications. Search "scholarships" on the CS web site: *www.cs.utexas.edu*.

Student organizations. The department hosts an Applied Computing Machinery chapter, a Women in Computer Sciences organization, the Turing Scholars Student Association, Upsilon Pi Epsilon (an honors student organization) and the Empowering Leadership Alliance for minority scholars.

Important Links.

Department web site: *www.cs.utexas.edu*
Financial aid: *http://finaid.utexas.edu/costs/070undergradcosts.html*
First year admissions: *http://bealonghorn.utexas.edu/freshmen/*
Video: *www.cs.utexas.edu/academics/undergraduate/prospective_students/*

Contact UTCS.

For additional information or to schedule a visit to UTCS, email *under-info@cs.utexas.edu,* or call the Computer Sciences Advising Center, located in 2.126 Taylor Hall, **(512)471-9509.**

THE UNIVERSITY OF TEXAS AT AUSTIN
Department of Computer Sciences

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Photo UTCS, Kay Nettle