

Computer Science

Computer Science is a cornerstone of a liberal arts education

A liberal arts education centers on thinking and knowledge. Computer Science studies the physical embodiments of thinking and knowledge. Computer Science helps you develop analytical skills and ways of thinking, which are useful in many different disciplines. You don't *really* know something until you have to teach it to a computer!

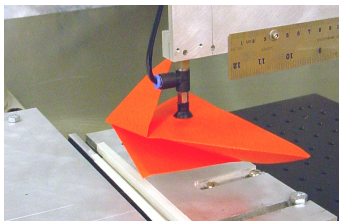


The Computer Science curriculum

The major is comprehensive, from theory to applications to systems-building. We teach not just how to program, but how to approach problems computationally, and how to devise appropriate solutions. Core courses include software design, algorithms, and computer architecture; electives span topics from artificial intelligence to bioinformatics to security. We have just launched a multi-disciplinary digital arts minor, with hands-on projects covering the principles, aesthetics, and practice of 3D modeling and animation. Four of our faculty members have won College awards based on teaching.

Research opportunities

Students have the chance to work with faculty outside the classroom, in cutting-edge research. Some examples....



Prof. Devin Balkcom and his students are building and programming robots to fold origami, climb walls, and work their way through rubble piles. Profs. Hany Farid and Dan Rockmore and their students have developed computational techniques to detect art forgeries and digital photo tampering. You've probably seen the work of Prof. Fabio Pellacini in "Finding Nemo" or "Cars." Prof. Amit Chakrabarti and his students study the fundamental limitations of computing -- what can we prove that computers will never be able to do?

Computers are everywhere now, embedded in all kinds of devices, sensing and reacting to the world. Prof. Andrew Campbell and his students are studying how to network thousands of such sensors.

Prof. Sean Smith and his students are making secure communication possible -- you know that only the desired recipient can read the email you sent, and the recipient knows for sure that it was you who sent it.



14 12:00 AM - Meriden Road 1	15	16
19 12:00 AM - Meriden Road 1	20	21
Meriden Road 1 Lunch Provider: None Crew Chief(s): None Group(s): Dartmouth Chapter(6) Volunteers signed up: 6 Volunteers still needed: 4		
26 12:00 Road		
last year	last month	Jan Feb Mar Apr May Jun Jul Aug

In addition to research, students build software that's useful in our community. One group built a web-based scheduling program for Habitat for Humanity, enabling volunteers to sign up for available construction jobs. Another group built a system for David's House (a home-away-from-home for children being treated at the hospital), to manage room reservations.

Post Dartmouth opportunities

The job market has been very hot recently. Students in the class of '06 had multiple competing job offers from top companies, large and small. We have "pipelines" of alumni at many great companies, and these companies show up each fall to recruit at the Engineering Career Fair. Students who want to pursue research go on to the top graduate programs in the world. Our alumni put their Computer Science skills to use in technology companies, at major consulting firms and on Wall Street, and in other disciplines such as medicine and digital art.

Visit us: Sudikoff Lab, Maynard and College Streets; www.cs.dartmouth.edu; 603-646-2206

