

COLLEGE OF COMPUTING

The founding of the College of Computing in 1990 as a focal point for the interdisciplinary advancement of computing caps a history that began in 1963 with the establishment of the School of Information Science. In 1972, this school was succeeded by the School of Information and Computer Science, the immediate predecessor of the current College of Computing. The College of Computing at Georgia Tech is one of the first college-level units devoted to the study of computing in the country.

Computing is an important basis for many activities and is a natural and powerful partner with a variety of other disciplines. The College offers instructional and research programs in many areas, including algorithms and data structures; intelligent systems, machine learning, artificial intelligence, and robotics; computer architecture; cognitive science; databases; distributed and parallel systems; educational technology; graphics and visualization; human-computer interaction; cybersecurity; social computing; networking and telecommunications; operating systems; parallel architectures; programming languages; software engineering; and theories of automata and computation.

Beginning in Fall 2006, the College's undergraduate program was organized around the Threads program developed by College of Computing faculty. A Thread is an intuitive, flexible, and mutually strengthening set of courses that allows students to craft a distinctive future in any computing-related field. Based on their particular interests, students pursuing a BS in Computer Science will choose two Threads—from: modeling and simulation; devices; theory; information internetworks; intelligence; media; people; or systems and architecture—in order to weave a technical degree with a broad collection of skills and learning experiences they need to thrive in a globally competitive world. This approach allows the computing program to retain its strong computing foundations yet encourages partnerships with the multitude of disciplines affected by computing and technology. The Threads also represent minors for students outside of computing who wish to pursue a focused computing minor. Undergraduates who want an even stronger foundation without earning a BS in Computer Science may pursue one of our joint degrees... which are also threaded:

- bachelor's degrees in computer science (CS),
- bachelor's degrees in computational media (jointly with the School of Literature, Media, and Communication and the School of Music), and
- bachelor's degrees in computer engineering (jointly with the School of Electrical and Computer Engineering)

In addition to our undergraduate degrees and minors, the College also offers over a dozen Master's degrees and PhDs in fields as diverse as human-computer interaction; Algorithms, Combinatorics, and Optimization; Robotics; and Machine Learning. All but one of these degrees crosses Schools in the College and more than half are joint with other Colleges.

This interdisciplinary nature is also reflected in our interdisciplinary research programs. For more information, please visit our web pages at: <https://www.cc.gatech.edu/>

The following undergraduate computing programs are accredited by the Computing Accreditation Commission of ABET, www.abet.org:

- Bachelor of Science in Computer Science
- Bachelor of Science in Computational Media

- Algorithms, Combinatorics, and Optimization. PhD
- Analytics. MS
- Bioengineering. MS, PhD
- BioInformatics. MS, PhD
- Computational Media. BS
- Computational Science and Engineering. MS, PhD
- Computer Science. BS, MS, PhD
- Computing and Business. Minor
- Computing and Devices. Minor
- Computing and Information Internetworks. Minor
- Computing and Intelligence. Minor
- Computing and People. Minor
- Computing & Systems and Architecture. Minor
- Computing and Theory. Minor
- Cybersecurity. MS
- Human-Computer Interaction. MS
- Human-Centered Computing. PhD
- Machine Learning. PhD
- Robotics. MS, PhD