COMPUTER SCIENCE

A.K. Watson Hall, 203.432.1246
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M.S., M.Phil., Ph.D.

Chair
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Associate Professors Yang Cai, Amin Karbasi, Theodore Kim, Smita Krishnaswamy, Sahand Negahban, Charalampos Papamanthou, Ruzica Piskac, Robert Soule, Jakub Szefer*

Assistant Professors Ian Abraham, Kim Blenman, Arman Cohan, Yongshan Ding, Benjamin Fisch, Tesca Fitzgerald, Julian Jara-Ettinger, Anurag Khandelwal, Quanquan Liu, Tom McCoy, Daniel Rakita, Katerina Sotiraki, David van Dijk, Marynel Vázquez, Andre Wibisono, Alex Wong, Zhitao Ying, Manolis Zampetakis

Senior Lecturers James Glenn, Stephen Slade

Lecturers Timos Antonopoulos, Timothy Barron, Ozan Erat, Kyle Jensen, Janet Kayfetz, Jay Lim, Dylan McKay, Cody Murphey, Sohee Park, Scott Petersen, Brad Rosen, Alan Weide, Cecillia Xie

* A secondary appointment with primary affiliation in another department or school.
† A joint appointment with another department.

FIELDS OF STUDY
Algorithms and computational complexity, artificial intelligence, data networking, databases, graphics, machine learning, programming languages, robotics, scientific computing, security and privacy, and systems.

RESEARCH FACILITIES
The department operates a high-bandwidth, local-area computer network-based mainly on distributed workstations and servers with internet connections. Laboratory contains specialized equipment for graphics, robotics, systems, and vision research. Various printers, including color printers, as well as image scanners, are also available. The primary educational facility consists of a large cluster of personal computers. This facility is used for courses and unsponsored research by computer science majors and
first-year graduate students. Access to computing, through both the workstations and remote login facilities, is available to everyone in the department.

**SPECIAL REQUIREMENTS FOR THE PH.D. DEGREE**

There is no foreign language requirement. To be admitted to candidacy, a student must

1. pass ten courses (including CPSC 690 and CPSC 691) with at least two grades of Honors, the remainder at least High Pass, including three advanced courses in an area of specialization;
2. take six advanced courses in areas of general computer science;
3. successfully complete a research project in CPSC 690, CPSC 691, and submit a written report on it to the faculty;
4. pass a qualifying examination in an area of specialization;
5. be accepted as a thesis student by a regular department faculty member;
6. serve as a teaching assistant for two terms; and
7. submit a written dissertation prospectus, with a tentative title for the dissertation.

Grades of Pass will not count toward the Ph.D. To satisfy the distribution requirement (requirement 2 above), the student must take one course in programming languages or systems, one programming-intensive course, two theory courses, and two in application areas. In order to gain teaching experience, all graduate students are required to serve as teaching assistants for two terms during their first three years of study. All requirements for admission to candidacy must be completed prior to the end of the third year. In addition to all other requirements, students must successfully complete CPSC 991, Ethical Conduct of Research, prior to the end of their first year of study. This requirement must be met prior to registering for the second year of study.

**MASTER’S DEGREES**

**M.Phil.** See Degree Requirements under Policies and Regulations.

**M.S. (en route to the Ph.D.)** To qualify for the M.S., the student must pass eight courses at the 500 level or above from an approved list. An average grade of at least High Pass is required, with at least one grade of Honors.

**Terminal Master’s Degree Program** Students may also be admitted to a terminal master’s degree program directly. There are two options for the terminal master’s degree:

- *Terminal Master’s Degree Program (coursework-only option)* The requirements are the same as for the M.S. en route to the Ph.D. This program is normally completed in one year, but a part-time program may be spread over as many as four years.
- *Terminal Master’s Degree Program (thesis option)* To qualify for the M.S. thesis option the student must (1) pass six courses at the 500 level or above from an approved list with an average grade of at least High Pass and with at least one grade of Honors; (2) complete a research thesis, generally in the second year; and (3) serve as a teaching assistant for four terms. This program is normally completed in two years.
Please use the links provided for additional information about the department, faculty, courses, and facilities online; You may also reach out to the departmental registrar at cs-admissions@cs.yale.edu.