Computer Science

Computer science is now integral to almost every field of study, from engineering and the natural and social sciences, to economics and business, and increasingly to the heavily text-based fields of literature and history. The trend is irreversible, driven by more powerful computers, larger data sets, the conversion of text and imagery into data, and better, more optimized algorithms.

MS Degree

The Master of Science (MS) program is intended for people who wish to broaden and deepen their understanding of computer science. Columbia University and the New York City environment provide excellent career opportunities with multiple industries. The program provides a unique opportunity to develop leading-edge in-depth knowledge of specific computer science disciplines. The department currently offers concentration tracks covering eight such disciplines. MS students are encouraged to participate in state of the art research with our research groups and labs.

Program Requirements

All students must complete the following requirements:

- Complete a total of 30 credits.
- Maintain at least a 2.7 overall GPA.
- Satisfy breadth requirements.
- Take at least 6 credits of technical courses at the 6000-level.
- A maximum of 3 credits of your degree can be non-CS/non-track courses. Non-CS/non-track courses must be approved by your advisor. See track webpages for more information.

Students can choose from one of the tracks below:

- Computational Biology
- Computer Security
- Foundations of Computer Science
- Machine Learning
- Natural Language Processing
- Network Systems
- Software Systems
- Vision, Graphics, Interaction, and Robotics
- MS Personalized
- MS Thesis
Computer Science Faculty

ROCCO A. SERVEDIO  
PROFESSOR AND CHAIR OF COMPUTER SCIENCE

OMRI WEINSTEIN  
ASSISTANT PROFESSOR OF COMPUTER SCIENCE

DANIEL HSU  
ASSOCIATE PROFESSOR OF COMPUTER SCIENCE

EUGENE WU  
ASSISTANT PROFESSOR OF COMPUTER SCIENCE; CO-CHAIR OF DATA, MEDIA, & SOCIETY CENTER IN THE DATA SCIENCE INSTITUTE

GAIL E. KAISER  
PROFESSOR OF COMPUTER SCIENCE

ROXANA GEAMBASU  
ASSOCIATE PROFESSOR OF COMPUTER SCIENCE

MICHAEL COLLINS  
VIKRAM S. PANDIT PROFESSOR OF COMPUTER SCIENCE

SUMAN JANA  
ASSISTANT PROFESSOR OF COMPUTER SCIENCE AND DATA SCIENCE INSTITUTE

Note: See the department faculty page for a full faculty list.