## 2024 DUKE UNIVERSITY







DEPARTMENT of COMPUTER SCIENCE

## **BY THE NUMBERS**





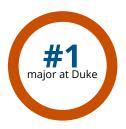




#### **COMPUTER SCIENCE PROGRAMS 2024**

#### **Undergraduate**

**448**CS majors graduated in 2024





#### **Graduate**

105 enrolled in PhD in CS

151 enrolled in MS in CS

**48** enrolled in **MS** in Economics & Computation

#### **FACULTY AND RESEARCH**

42 Primary Faculty

**30** Secondary Faculty

#### Research Areas cs.duke.edu/research

- Artificial Intelligence
- Computation + X
- Computer Science Education
- Data Science
- Systems
- Theoretical Computer Science

#### **NEW CS FACULTY**



Monica Agrawal (2024) Machine Learning/Natural Language Processing (NLP)



Eric Fouh (2024) Computer Science Education

#### **PROMOTIONS**



Kristin Stephens-Martinez (2024) Associate Professor of the Practice



Danfeng Zhang (2024) Associate Professor

#### **FACULTY RETIREMENT**



Professor Alvin Lebeck retires after nearly 29 years in service to the department.

## Cynth

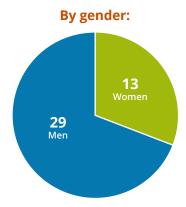
DISTINGUISHED PROFESSORSHIP

Cynthia Rudin named Gilbert, Louis, and Edward Lehrman Distinguished Professor. For more information about our faculty and their achievements, visit cs.duke.edu/people/faculty.

#### **FACULTY BY THE NUMBERS**

## **17** Primary Faculty





#### **FACULTY DISTINCTIONS**

- **6** Association for Computing Machinery (ACM) Fellows
- 3 Institute of Electrical and Electronic Engineers (IEEE) Fellows
- **2** American Association for the Advancement of Science (AAAS) Fellows
- 2 Guggenheim Fellows
- 2 Cultural Competence in Computing (3 C) Fellows
- **2** Association for the Advancement of Artificial Intelligence (AAAI) Fellows

- 1 Institute of Mathematical Statistics Fellow
- **1** American Statistical Association Fellow
- **1** Institute of Combinatorics and Its Applications Fellow
- 1 Alfred P. Sloan Fellow
- **3** Sloan Foundation Research Fellowships
- **14** National Science Foundation (NSF) Career Awards

#### **NEW FACULTY ROLES**



Jian Pei (2023) Chair of the Department of Computer Science



Kristin Stephens-Martinez (2024) Associate Director of Undergraduate Studies



Brandon Fain (2024) Summer CS+ Program Director



Nicki Washington (2023) Cue Family Professor of the Practice of Computer Science



Rong Ge (2024) Cue Family Associate Professor of Computer Science

# THE UNDERGRADUATE EXPERIENCE



For more information, visit cs.duke.edu/undergrad

#### PROGRAM FACTLETS

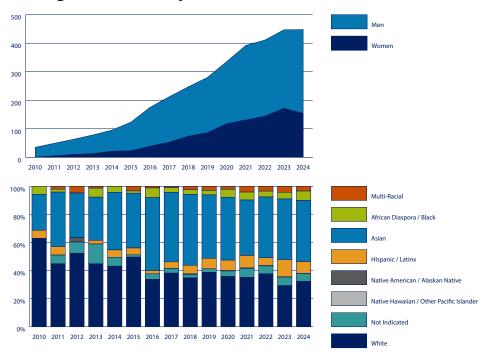
## Graduated in 2024 448 97 CS majors CS minors

#### **Flexible Pathways:**

- Major concentrations: Al/ML, Data Science, Software Systems
- Interdepartmental majors:
  Data Science + Math or Statistics;
  Linguistics + CS or Visual & Media
- Minors: CS, Al: Applic. & Implic., Comp Biology/Bioinformatics
- MS in CS 4+1 Program: MSCS in 5 yrs
- Most popular double majors with CS:
  1) ECE, 2) Econ, 3) IECP (Innovation & Entrepreneurship Cert), 4) Statistics, 5) Math
- Most popular minors to go with CS:
  1) Econ, 2) Psych., 3) Asian & Mid. East. 4)
  Statistics, 5) Visual & Media Studies
- Most popular majors with CS minor:
  1) Econ, 2) Mech. Eng., 3) ECE, 4) Public Policy, 5) Biology AND Physics

#### **DEMOGRAPHIC TRENDS**

#### **CS Degrees Awarded by Year:**



#### **BEYOND THE CLASSROOM**

#### 83 CS majors participated in 2024 Summer Plus Programs

- **CS+** research projects in the CS department
- Code+ software development projects with Office of Information Technology
- Data+ Interdisciplinary data science projects with the Rhodes Information Initiative at Duke

#### **538** Women majoring in CS are currently DTech Members

- DTech (Duke Technology Scholars Program) empowers the next generation of diverse leaders
- 1,308 women participated in DTech since its founding in 2016

#### **15** Student clubs and organizations include:

- Women in Technology
- HackDuke
- Duke Applied Machine Learning
- Catalyst
- Duke Association for Business Oriented Women (BOW)

More at cs.duke.edu/undergrad/organizations

### **All** CS majors are welcome in the CS Student Union.



#### **UNDERGRADUATE AWARDS 2023-2024**

- 8 Graduation with Distinction Awards
- 4 Computing Research Association (CRA) Awards for Undergraduate Research:
  - 4 Honorable Mentions: Harry Chen, Michelle Qiu, Dennis Tang, Frank Willard
- **3 Goldwater Scholars:** Ayush Jain, Michelle Si, Marie-Hélène Tomé

## THE GRADUATE EXPERIENCE







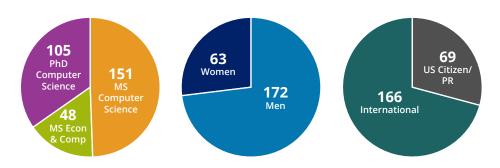
Master's students include:

MS in Computer Science (MSCS) + MS in Economics and Computation (MSEC).

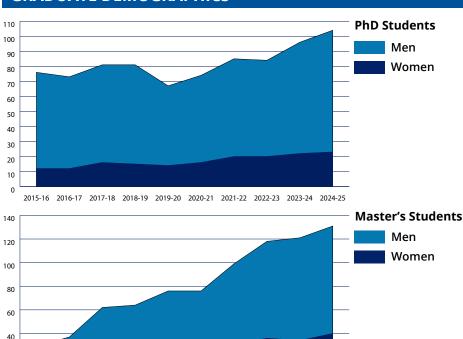


For more information, visit cs.duke.edu/graduate

#### **GRADUATE ENROLLMENT 2024-2025**



#### **GRADUATE DEMOGRAPHICS**



2015-16 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24 2024-25

20

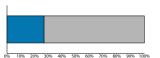
#### **ADMISSIONS**



**PhD:** 9.1% accepted out of 614 applicants



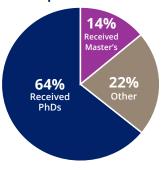
**MSCS:** 17.9% accepted out of 845 applicants



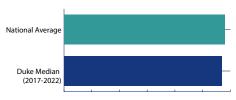
**MSEC:** 27% accepted out of 178 applicants

#### **PhD STATISTICS**

#### **Completion Rate:**



#### **Completion Time:**



- Duke Median (2017-2022): 5.7 years
- US National Median: 5.8 years

#### **RECENT GRADUATE FELLOWSHIPS**



Jabari Kwesi NSF GRFP



Jonathan Donnelly NSF GRFP



Ruoyu (Roy) Xie NSF GRFP



Benjamin Holmgren DOE CSGF

#### **ACADEMIC PLACEMENTS**

Postdoctoral associates and PhDs who recently accepted faculty positions:



Alper Bozkurt University of Maryland



Chudi Zhong UNC Chapel Hill



Lesia Semenova Rutgers University



**Mo Zhou** University of Washington

## **ACADEMIC PROGRAMS**

Undergraduate

cs.duke.edu/undergraduate

Graduate

cs.duke.edu/graduate

#### RESEARCH AREAS

#### **Artificial Intelligence**

cs.duke.edu/research/artificialintelligence

Computation + X

cs.duke.edu/research/computationplusx

**Computer Science Education** 

cs.duke.edu/research/compscieducation

**Data Science** 

cs.duke.edu/research/datascience

Systems

cs.duke.edu/research/systems

**Theoretical Computer Science** 

cs.duke.edu/research/theory-algorithms

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