



# COMPUTER SCIENCE



Established in 1967, we are located on NC State's award-winning Centennial Campus.

## POINTS OF INTEREST ■ ■ ■ ■ ■ ■ ■ ■

### ACADEMICS

#### *Undergraduate degree programs*

- Bachelor of Science in Computer Science\*
- Game Development Concentration
- Undergraduate Minor, Computer Programming
- Certificate in Computer Programming

#### *Graduate degree programs*

- Ph.D.
- Master of Science (Thesis and non-thesis options)
- Master of Computer Science (Professional degree, non-thesis, with on-campus or Distant Education options)
- Master of Computer Science - Tracks in Data Science, Security, and Software Engineering
- Master of Networking (Thesis and non-thesis options) with available concentration in Service Sciences, Management and Engineering (SSME)

### KEY STATISTICS

- Established in 1967 - one of the first official Computer Science Departments in the U.S.
- Approximately 48 faculty, 7 emeritus faculty, 23 lecturers and adjuncts, and 39 research, IT and administrative staff
- Rankings:
  - 3<sup>rd</sup> among Online Master's Degree programs (Best Buy Online Degree) <sup>1</sup>
  - 9<sup>th</sup> in Computer Science M.S. enrollment <sup>2</sup>
  - 11<sup>th</sup> in Computer Science Ph.D. enrollment <sup>2</sup>
  - 15<sup>th</sup> in Computer Science undergraduate enrollment <sup>2</sup>
  - 19<sup>th</sup> in Computer Science BS degrees awarded <sup>2</sup>
  - 12<sup>th</sup> in Computer Science research expenditures <sup>2</sup>
  - 4<sup>th</sup> in Computer Science MS degrees awarded <sup>2</sup>
  - 9<sup>th</sup> in Computer Science PhD degrees awarded <sup>2</sup>
  - 6<sup>th</sup> in Best Online Graduate Computer Information Technology programs <sup>3</sup>
  - 1<sup>st</sup> in Tenure-track female faculty among all CSC depts. in Colleges of Engineering <sup>2</sup>
  - 5<sup>th</sup> on Go Grad's 2015-2016 List of Best Master's Programs in Computer Science

- Engineering Online Ranked Nation's Best Online Graduate Engineering Program for Veterans and Active-duty Military Personnel (2013) <sup>3</sup>
- Enrollment 2017-18 Academic Year
  - Undergraduate 1,049
  - Master's 507
  - Doctoral 197
- Incoming Freshmen Fall 2017
  - Average GPA: 4.66 (weighted scale)
  - Most admissions between 4.37-4.95
  - Average SAT: 1399 (reading and math only)
  - Most admissions between 1244-1458
- Facilities
  - Engineering Building II (EB2), state-of-the-art teaching and research facility, opened in fall 2006
  - Numerous research and teaching centers, institutes, laboratories and groups (e.g., Center for Educational Informatics, Digital Games Research center (DGRc), etc.)
  - Leading-edge networking and computational infrastructure
  - Corporate and Career Services Suite
- Designated by NSA and DHS as a National Center of Excellence in Information Assurance Research (CAE-R)
- Academic Alliance Member of National Center for Women and Information Technology
- Recognized as a Laureate in Computerworld Honors Program in 2007 and 2009
- Video Game Design and Development program recognized by *The Princeton Review* as #7 among public universities, and #38 overall.

### OPPORTUNITIES

- Research with faculty - research centers and groups, undergraduate opportunities, scholars and honors programs
- Applied learning - award-winning capstone Senior Design Center projects
- More than 100 companies actively partner with the department via sponsored programs, research, scholarships, projects and initiatives.

- The department has a variety of student organizations providing leadership skills, service, networking, and informal learning opportunities, including:
  - ACM/AITP
  - Graduate Student Association
  - Honors Program/Honor Societies
  - Linux Users Group
  - STARS Student Leadership Corps
  - Women in Computer Science (WiCS)
- National competitions and recognition: student honors include 1st place in CSIDC World Finals, ACM Grand Award, Google Anita Borg Scholarship, IBM's Extreme Blue Internships, USA Today, Academic All American.
- Computer science students are eligible for College of Engineering and University-wide scholarships. Details available at [www.csc.ncsu.edu/academics/undergrad/scholarships](http://www.csc.ncsu.edu/academics/undergrad/scholarships).
- Computer science-specific scholarships: 26 endowed and numerous sponsored and external

## AREAS OF EXPERTISE

- Artificial intelligence
- Bioinformatics and computational sciences
- Computer-based education
- Graphics and visualization
- High-performance & power aware systems
- Networks
- Security
- Software engineering
- Theory and algorithms

The faculty foster strong multidisciplinary and collaborative interaction with other disciplines at NC State (e.g., Bio-informatics, eCommerce, serious games, etc.), other universities, industry, government agencies and laboratories, and other partners in the Research Triangle Park (RTP) and beyond.

## CAREERS

- Average starting salaries, May 2017<sup>1</sup>
  - BS CSC - \$70,000
  - MS CSC - \$108,000
- Proximity to world-famous Research Triangle Park (RTP) provides many

opportunities for internships and co-ops. Approximately 25% of all NC State Engineering co-ops are from the department of Computer Science.

- NC State is a top supplier of new graduate talent to Cisco, IBM, SAS, NetApp, Fidelity Investments, Amazon, and many others.
- Computer Science related careers listed among US News & World Reports "Best STEM Jobs of 2017"<sup>5</sup>:
  - #2 - Computer Systems Analyst
  - #3 - Software Developer
  - #9 - Web Developer
  - #12 - Computer Network Architect
  - #16 - Database Administrator
  - #19 - Information Security Analyst

## FACULTY HONORS

- 28 National Science Foundation CAREER Award recipients and one NSF Young Investigator Award recipient
- National Academy of Engineering member
- Emmy Award recipient, National Academy of Television Arts & Sciences - for plasma screen technology
- Consumer Electronics Hall of Fame Inductee
- National Inventor's Hall of Fame Inductee
- DOE Early Career PI Award recipient
- 2 American Association for Artificial Intelligence Fellows and a Senior Member
- American Mathematical Society Fellow
- 7 Institute of Electrical and Electronics Engineers (IEEE) Fellows
- IEEE Dist. Service Award recipient
- 3 IEEE Golden Core members
- IEEE Computer Society Dist. Scientist, Dist. Visitor, and 2 Dist. Lecturers
- ACM SIGSOFT Inaugural Influential Educator Award recipient
- 3 ACM Distinguished Scientists
- Computing Research Assoc. (CRA) Digital Government Fellow
- NCDS Data Science Faculty Fellow
- 2 Senior Research Ethics Fellows
- Microsoft Research Outstanding Collaborator Award winner
- Center for Democracy & Technology Fellow

- IBM Smarter Planet Innovation Faculty Award winner
- Gordon and Betty Moore Foundation Moore Investigator Award winner
- 2 NC State University Faculty Scholars
- 3 recipients of the NC State Alumni Association Outstanding Research Award
- 11 members in the NC State Academy of Outstanding Teachers
- NC State Academy of Outstanding Faculty Engaged in Extension member

## SELECT DISTINGUISHED ALUMNI

- **David Burke** - Director of Cyber Warfare for Naval Aviation
- **Marshall Brain** - Founder of HowStuffWorks.com; NC State Distinguished Engineering Alumnus
- **Keith Collins** - EVP and CIO, SAS Institute; NC State Distinguished Engineering Alumnus
- **Brenda Crutchfield** - Deputy Director of Future Operations, US ARCYBER
- **Nirmit Desai** - Research Staff, IBM and Creator of Mesh Network Alerts
- **Suzanne Gordon** - Retired CIO, SAS Institute
- **Dr. Larry Hodges** - VR Expert and Professor of Human-Centered Computing at Clemson University
- **Richard Holcomb** - Serial Entrepreneur
- **Bobby Johnson, Jr.** - Former CEO and Co-founder of Foundry Networks; NC State Distinguished Engineering Alumnus
- **Dr. Elizabeth Mynatt** - Distinguished Professor; Executive Director, Georgia Tech Institute for People and Technology
- **Rudy Puryear** - Partner and Director, Bain & Company IT practice
- **Troy Tolle** - Co-founder and CTO, DigitalChalk, Inc.
- **Erik Troan** - Serial Entrepreneur
- **Donna Troy** - Retired EVP and General Manager, Epicor Software
- **Josh Whiton** - Founder and Former CEO, TransLoc, Inc.
- **Dr. Pinar Yolum** - Entrepreneur and Professor, Bogazici University

Our 9,000+ alumni are located in all 50 US states and in 24 countries

\* Accredited by CAC/ABET

<sup>1</sup> [www.geteducated.com/rankings/best\\_computer.asp](http://www.geteducated.com/rankings/best_computer.asp)

<sup>2</sup> ASEE data, 2016-2017

<sup>3</sup> U.S. News and World Report, 2017

<sup>4</sup> NC State University Career Center

<sup>5</sup> [money.usnews.com/careers/best-jobs/rankings/best-stem-jobs](http://money.usnews.com/careers/best-jobs/rankings/best-stem-jobs)