

# 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 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
- Approximately 47 faculty, 6 emeritus faculty, 8 lecturers and adjuncts, and 37 research, IT and administrative staff
- Rankings:
  - 7<sup>th</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>
  - 6<sup>th</sup> in Computer Science Ph.D. enrollment <sup>2</sup>
  - 22<sup>nd</sup> in Computer Science undergraduate enrollment <sup>2</sup>
  - 14<sup>th</sup> in Computer Science BS degrees awarded <sup>2</sup>
  - 10<sup>th</sup> in Computer Science research expenditures <sup>2</sup>
  - 6<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>
  - 7<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 2016-17 Academic Year
  - Undergraduate 918
  - Master's 507
  - Doctoral 203
- Incoming Freshmen Fall 2016
  - Average GPA: 4.66 (weighted scale)
  - Most admissions between 4.37-4.95
  - Average SAT: 1351 (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
- 1st U.S. university to be awarded a Cisco TelePresence unit
- 1st U.S. research university to offer multi-disciplinary masters level curricula in services (SSME)
- Recognized as a Laureate in Computerworld Honors Program in 2007 and 2009
- Video Game Design and Development program recognized by *The Princeton Review* as #9 among public universities, and #33 overall.

### OPPORTUNITIES

- Research with faculty - research centers and groups, undergraduate opportunities, scholars and honors programs
- Applied learning - award-winning capstone Senior Design Center projects

- 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.
- CSC-specific scholarships: 25 endowed and numerous sponsored and external
- CSC students are also 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).
- More than 90 companies actively partner with the department via sponsored programs, research, scholarships, projects and initiatives.

## AREAS OF EXPERTISE

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

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 2016<sup>4</sup>
  - BS CSC - \$72,419
  - MS CSC - \$102,249

- 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 2016"<sup>5</sup>:
  - #1 - Computer Systems Analyst
  - #2 - Software Developer
  - #4 - Web Developer
  - #9 - Information Security Analyst

## FACULTY HONORS

- 24 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
- American Association for Artificial Intelligence Fellow and Senior Member
- American Mathematical Society Fellow
- 7 Institute of Electrical and Electronics Engineers (IEEE) Fellows
- IEEE Dist. Service Award recipient
- 2 IEEE Golden Core members
- IEEE Computer Society Dist. Scientist, Dist. Visitor, and 2 Dist. Lecturers
- ACM SIGSOFT Inaugural Influential Educator Award recipient
- 2 ACM Distinguished Scientists
- Computing Research Assoc. (CRA) Digital Government Fellow
- American Academy of Forensic Sciences (AAFS) associate member
- 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
- 12 members in the NC State Academy of Outstanding Teachers
- NC State Academy of Outstanding Faculty Engaged in Extension member

## SELECT DISTINGUISHED ALUMNI

- **Thushan Amarasiwardena** - Founder, LaunchPad Games and creator of award-winning Toontastic App
- **Marshall Brain** - Author, TV Star & Founder of HowStuffWorks.com; NCState Distinguished Engineering Alumnus
- **Keith Collins** - CTO, SAS Institute; NC State Distinguished Engineering Alumnus
- **Suzanne Gordon** - CIO (retired), SAS Institute; NC State Board of Trustees
- **Dr. Larry Hodges** - hf Flagship Director of the School of Computing at Clemson University
- **Bobby Johnson** - Former CEO and Co-founder of Foundry Networks; NC State Distinguished Engineering Alumnus
- **Richard Krueger** - developed xRes (now Macromedia's Fireworks), President & CEO of Skinux
- **Dr. Elizabeth Mynatt** - Executive Director, Georgia Tech Institute for People and Technology
- **Rudy Puryear** - ranked as one of world's Top 25 Consultants by Consulting Magazine
- **Erik Troan** - Co-author of Red Hat Package Mgr and "Linux Application Development," Senior Consultant with Plaza Bridge Group

Our 7,400+ 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, 2014-2015

<sup>3</sup> U.S. News and World Report, 2014

<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)