27 NEW FACULTY HIRES OVER THE LAST FOUR YEARS

Bita Akram
Assistant Teaching Professor
Ph.D. (2019), NC State University
Research interests: Advanced learning technologies, and improving access and quality of computer science education.

Alexander Card
Assistant Teaching Professor
Ph.D. (2022), NC State University
Research interests: Computer science and game design education, especially in project-based courses featuring design work, as well as procedural content generation.

Marcelo d'Amorim
Associate Professor
Ph.D. (2007), University of Illinois at Urbana-Champaign
Research interests: Software testing and debugging, runtime verification, artificial intelligence (AI) for software engineering (SE), SE for AI, code repair.
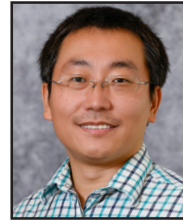
Anupam Das
Assistant Professor
Ph.D. (2016), University of Illinois at Urbana-Champaign
Research interests: Data science and cybersecurity.

Ignacio Domínguez
Assistant Teaching Professor
Ph.D. (2018), NC State University
Research interests: Human behavior in video games and virtual environments that can be used to identify, predict and influence behavior and decision-making.

Adam Gaweda
Assistant Teaching Professor
Ph.D. (2022), NC State University
Research interests: Activity sequences, educational data mining, novel exercise types, training regimens, student modeling, personalized student feedback, general student attitudes toward computer science.

Zhishan Guo
Associate Professor
Ph.D. (2016), University of North Carolina at Chapel Hill
Research interests: Real-time scheduling, machine learning (time series prediction and sparse discriminant learning), cyber-physical systems (autonomous driving and medical).

Jamie Jennings
Assistant Teaching Professor
Ph.D. (1995), Cornell University
Research interests: Theory, programming languages, software engineering, robotics and artificial intelligence.

Shuyin Jiao
Assistant Teaching Professor
Ph.D. (2015), University of Houston
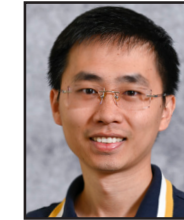Research interests: Program analysis and computer education.

Jung-Eun Kim
Assistant Professor
Ph.D. (2017), University of Illinois at Urbana-Champaign
Research interests: Resource- and time-dependent machine learning, AI/machine learning for cyberphysical and embedded systems, safety- and time-critical systems and real-time multicore systems.

Sandeep Kuttal
Associate Professor
Ph.D. (2014), University of Nebraska-Lincoln
Research interests: Human-computer interaction, software engineering and artificial intelligence, with a focus on the human aspects of software engineering.

Jiajia Li
Assistant Professor
Ph.D. (2018), Georgia Institute of Technology
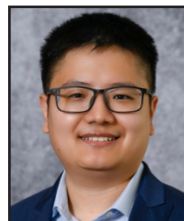Research interests: High-performance computing, tensor algorithms, auto-tuning.

Jianqing Liu
Assistant Professor
Ph.D. (2018), University of Florida
Research interests: Computer communications and networking with emphasis on MAC- and network-layer design and evaluation, network security, data privacy, low-power Internet-of-Things, quantum networks.

Xiaorui Liu
Assistant Professor
Ph.D. (2022), Michigan State University
Research interests: Large-scale machine learning, distributed optimization, trustworthy artificial intelligence, security and fairness in AI, deep learning on graphs and graph neural networks.

Xu Liu
Assistant Professor
Ph.D. (2014), Rice University
Research interests: Program analysis in high-performance computing systems.

Yuchen Liu
Assistant Professor
Ph.D. (2022), Georgia Institute of Technology
Research interests: Networking and wireless systems, mobile computing, machine learning for networking and sensing, new communication paradigms, optimization and resilience, software and simulator development for computer networks.

Noboru Matsuda
Associate Professor
Ph.D. (2005), University of Pittsburgh
Research interests: Technology innovation and integration to advance the sciences of learning.

Sterling McLeod
Assistant Teaching Professor
Ph.D. (2019), University of North Carolina at Charlotte
Research interests: Robot motion planning, software testing for robotics, computer science education.

John-Paul Ore
Assistant Professor
Ph.D. (2019), University of Nebraska-Lincoln
Research interests: Software engineering, robotics, program analysis, system testing using high-resolution physical simulators.

Thomas Price
Assistant Professor
Ph.D. (2018), NC State University
Research interests: Computing education, intelligent tutoring systems, educational data mining and novice programming environments.

Bradley Reaves
Assistant Professor
Ph.D. (2017), University of Florida
Research interests: Measuring and improving the security and privacy of computer systems, with emphasis on telephone networks and software for mobile platforms.

Gregg Rothermel
Professor and Department Head
Ph.D. (1985), Clemson University
Research interests: Software engineering and program analysis with emphases on the application of techniques to problems in software maintenance and testing, end-user software engineering and empirical studies.

Don Sheehy
Associate Professor
Ph.D. (2011), Carnegie Mellon University
Research interests: Computational geometry and topological data analysis.

Sharma Thankachan
Associate Professor
Ph.D. (2014), Louisiana State University
Research interests: String algorithms, compressed data structures, bioinformatics.

Dongkuan Xu
Assistant Professor
Ph.D. (2022), Pennsylvania State University
Research interests: Efficient large-scale training/inference in natural language processing/computer vision, scalable and reliable deep learning, algorithm-hardware co-design for AI acceleration.

Man-Ki Yoon
Assistant Professor
Ph.D. (2017), University of Illinois at Urbana-Champaign
Research interests: Security of safety-critical cyber-physical systems, real-time embedded computing, accountable computing for autonomous systems.

Ruozhou Yu
Assistant Professor
Ph.D. (2019), Arizona State University
Research interests: Computer networks, distributed systems, cybersecurity.

csc.ncsu.edu

NC STATE Engineering

NC STATE COMPUTER SCIENCE

NORTH CAROLINA'S PREEMINENT LEADER IN COMPUTER SCIENCE EDUCATION AND RESEARCH

RESEARCH AREAS

Artificial Intelligence

Computer-Assisted Learning

Cybersecurity

Cyber-Physical Systems

Data Science

Networks

Software Engineering Systems

Theory and Algorithms

UNDERGRADUATE DEGREE PROGRAMS

Bachelor of Science in Computer Science

Concentrations in Game Development, Cybersecurity and Artificial Intelligence

Undergraduate Minor, Computer Programming

Accelerated Bachelor's / Master's (ABM) Degree Program

Certificate in Computer Programming

Undergraduate Tracks in Security and Entrepreneurship

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 distance 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

#1
in the world for **computer science education research** for the period 2015-20

#2
in the world for **software engineering research** for the period 2017-20

45
TENURED AND TENURE-TRACK FACULTY MEMBERS

34
NATIONAL SCIENCE FOUNDATION CAREER AWARD winners on the departmental faculty

DEGREES AWARDED 2021-22

294 B.S. DEGREES

103 M.S. DEGREES

28 PH.D. DEGREES

$13.2 MILLION
IN ANNUAL RESEARCH EXPENDITURES

$19.5 MILLION
IN NEW RESEARCH AWARDS 2021-22

THE RIGHT LOCATION

The Department of Computer Science is located on NC State's Centennial Campus, one of the premier academic / industry innovation campuses in the United States. Students have an opportunity to take classes and conduct research in proximity to leading companies in their field.

Raleigh, NC, home of NC State, is annually ranked as one of the best places in the United States to live, work and start a family. The Research Triangle area of the state is experiencing some of the fastest technology sector growth of any area in the country.
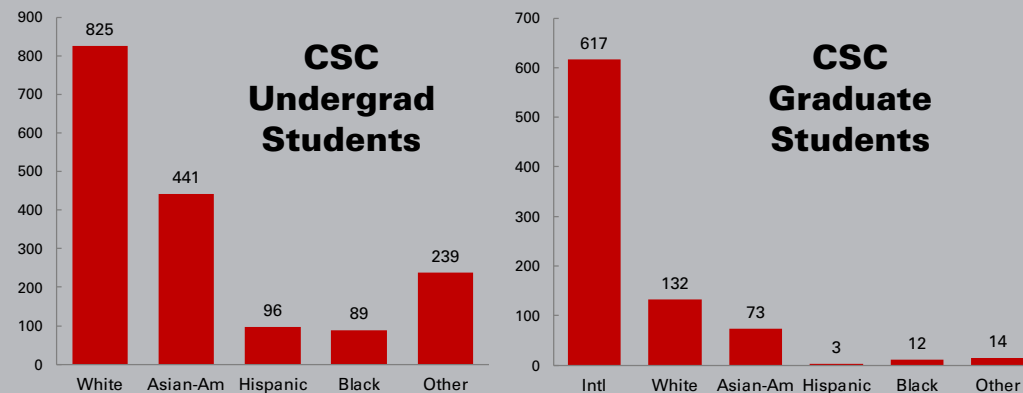
ENROLLMENT AND BEYOND 2022-23

1,690 Bachelor's students

617 Master's students

234 Doctoral students

A RECORD 603 WOMEN STUDENTS are in the department.

ENROLLMENT DIVERSITY

CSC Undergrad Students

Category	Count
White	825
Asian-Am	441
Hispanic	96
Black	89
Other	239

CSC Graduate Students

Category	Count
Intl	617
White	132
Asian-Am	73
Hispanic	3
Black	12
Other	14

MEDIAN STARTING SALARIES 2021-22

B.S. CSC — **$90,000**

M.S. CSC — **$129,000**

May 2022 graduates had NC State's **highest median starting salaries**.

PLACEMENT DATA MAY 2022

69.7 PERCENT of bachelor's degree graduates reported having accepted a full-time position at the time of graduation.

13.2 PERCENT of bachelor's degree graduates reported plans to pursue a graduate degree.

ENGINEERING NORTH CAROLINA'S FUTURE

The College of Engineering is expanding, thanks to a state legislative effort designed to meet the employment needs of North Carolina's booming technology industry. **Engineering North Carolina's Future** represents an enormous opportunity for computer science undergraduate and graduate students.

4,000 additional engineering and computer science students

$30 million upgrade to engineering and computer science facilities

$20 million for additional faculty and staff members in the College of Engineering

DEPARTMENT HEAD GREGG ROTHERMEL JOINED NC STATE IN 2018

Gregg Rothermel is an IEEE Fellow and an ACM Distinguished Scientist. Prior to returning to academia, he was a software engineer and vice president of quality assurance and quality control for Palette Systems, a manufacturer of CAD / CAM software.

Rothermel's research interests include software engineering and program analysis, with emphases on the application of program analysis techniques to problems in software maintenance and testing, end-user software engineering, and empirical studies.