SEARCH PROFILE:

BANK OF AMERICA DISTINGUISHED PROFESSOR IN CYBER SECURITY





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ABOUT THE UNIVERSITY OF NORTH CAROLINA CHARLOTTE

UNC Charlotte is North Carolina's urban research university nestled in one of America's fastest growing and most diverse cities. It leverages its location in the state's largest city to offer internationally competitive programs of research and creative activity, exemplary undergraduate, graduate, and professional programs, and impactful community engagement initiatives. UNC Charlotte is committed to working collaboratively with community partners to address the cultural, economic, educational, environmental, health, and social needs of the greater Charlotte region in line with the community's focus on racial equity and economic mobility.

Enrollment exceeds 31,000 students – making it the third largest university of the 17 institutions within the UNC System. UNC Charlotte is also the fastest growing institution in the UNC System, comprising nine academic colleges offering 171 undergraduate majors in 77 programs leading to bachelor's degrees, 65 master's degrees, and 24 doctoral degrees. UNC Charlotte is proud to have 3,700 passionate and committed faculty and staff members and more than 120,000 living alumni.

Responding to the need to serve returning veterans immediately after WWII, UNC Charlotte is one of a generation of schools founded in metropolitan areas just after the war to meet the rising post- war demands for higher education. On September 23, 1946, the State of North Carolina opened the Charlotte Center of the University of North Carolina with an enrollment of 278 students. In 1961, the school moved its main campus from Uptown Charlotte to its current location on 1,000-acre campus 10 miles from the city center. The main campus is connected to the city center of Charlotte and the Dubois Center at UNC Charlotte Center City by Charlotte Area Transit System light rail.

From its inception, in keeping with the State of North Carolina's commitment to provide affordable access to quality education, the University has worked to make learning accessible to all. Though now a large researchintensive urban university, UNC Charlotte has maintained
its entrepreneurial culture and its commitment to
innovation. As the System's "Urban Research University,"
the institution continues to be essential to the region's
economic and civic vitality. The Office of Urban Research
and Community Engagement serves as the hub of the
University's engaged scholarship ecosystem, mobilizing,
assessing, and advancing efforts that connect the
University's interdisciplinary, urban research resources
to community assets to co-create a thriving, inclusive
region.

Largely because of this commitment, UNC Charlotte is the No. 1 institution in North Carolina in awarding bachelor's degrees to Latinx students; enrollment among Black/African American freshman has grown by 30%; enrollment has increased 43% for first year Latinx students; and 33% of the incoming class are first-generation college students. As of Fall of 2024, the University has 15.6% of the undergraduate student population identifying as Hispanic, becoming an Emerging Hispanic-Serving Institution, as recognized by Excelencia in Higher Education.

UNC Charlotte has a strong focus going forward on student success and access, and research results that strive to advance the institution's quality and growth through diversity, equity, and inclusivity. This pursuit has been reinforced through key administrative appointments and adoption of forward-looking strategic documents.

Since 2020, the University has climbed 76 spots in the *U.S. News and World Report*'s 2025 Best Colleges rankings, the fastest rising among any national university in the Carolinas. UNC Charlotte is projected to become an 'R1' university in early 2025; a Carnegie Foundation designation for the highest level of research activities among doctoral institutions.



CHARLOTTE, NORTH CAROLINA

Fueled by rapid job growth and an affordable cost of living, in 2022-2023 Charlotte was ranked as the country's fifth fastest growing big city and is a top millennial hub. With an estimated population of over 900,000 and an average of 117 people moving to Charlotte per day, Charlotte is the 15th most populous city in the U.S., 22nd largest metro area, and the second largest banking hub in the U.S.

The Charlotte region is home to headquarters for 10 Fortune 500 companies and 17 Fortune 1000 companies, such as Bank of America, Lowe's, Honeywell International, Duke Energy, Nucor, Sonic Automotive and Sealed Air, among many others. The city is also home to the NFL's Carolina Panthers, NBA's Charlotte Hornets, NASCAR Hall of Fame, and the 6th largest airport in the country. The region offers a wide array of cultural activities, such as the Charlotte Ballet, Mint Museum, Blumenthal Performing Arts, and many outstanding and award-winning restaurants and eateries.

In the heart of the city of Charlotte is the Dubois Center at UNC Charlotte Center City, the only University of North Carolina building conceived and designed specifically to serve the people, organizations, and businesses of the urban center. Conveniently located next to the Center

City campus, a new light rail system provides a physical connection between the Center City and University City campuses. Center City provides the institution with an enduring presence in the city's business and cultural district, bringing the University's considerable intellectual resources to the heart of the Charlotte community. With 143,000 square feet, 25 classrooms and design studios, meeting and performance spaces, an art gallery, and a four-acre park, it speaks to a new vision in higher education that includes urban education, research, engagement, and sustainability. College of Computing and Informatics teaches graduate classes at the Dubois Center at UNC Charlotte Center City, emphasizing the link between the city and our students.

Over the past five years, the region has focused its collective community, civic, and corporate resources on reducing long-standing racial disparities around economic and social outcomes, and ensuring equitable economic mobility among all residents, regardless of race, ethnicity, or zip code. The community's <u>Leading on Opportunity Task Force</u>, driven by the Foundation For The Carolinas in collaboration with dozens of organizations and institutions, including UNC Charlotte, has led this community-wide effort.



THE COLLEGE OF COMPUTING AND INFORMATICS

The College of Computing and Informatics (CCI) at UNC Charlotte is one of the most comprehensive and innovative computing colleges in the country. With over 150 faculty and staff and 5,100 students (3,400 undergraduate and 1,700 graduate), CCI graduates more than 1,400 Bachelors, Masters, and Ph.D. holders a year. The College is currently organized in four academic units: Department of Computer Science (CS), Department of Software and Information Systems (SIS), Department of Bioinformatics and Genomics (BiG), and the School of Data Science (SDS). CCI has distinct research strengths in Al & Machine Learning, Cybersecurity, Privacy and Trustworthy Computing, Computational Bioinformatics & Genomics, Human-Centered Design, High-Performance Computing, and CS education. Located in Charlotte, the largest and fastest growing city in the Carolinas, CCI engages with the community and neighboring industries around common social, research, and development initiatives. The College is an active innovation partner with every major industry in the region.

The College's curricula, pedagogy, and administrative structures are designed to be modern, agile, adaptable, and socially responsible. CCI enrolls and graduates one of the most diverse student populations in the country, including the largest number of women, the largest number of African Americans, and the largest number of Hispanics in the Carolinas. It was featured in a Communications of the ACM article and presented as a model of inclusive excellence for other computing programs and received the CMD-IT University Award. At the master's level, CCI has been broadening its offerings to meet the growing needs of lifelong learning for professional development and personal growth.

The College has a vibrant and innovative research program with an annual expenditure of more than \$10M/ year. In December 2022, CCI ranked 39th in the NSF Higher Education Research & Development (HERD). Nine faculty members are NSF CAREER awardees, one is a AAAI Feigenbaum Awardee, and six were ranked among the top 2% of scientists in the world based on the study conducted and published in 2022. The CCI faculty research and programs rank high in almost every metric (Visualization top 30, parallel and highperformance computing (PHPC) top 40, and Robotics top 45). Expertise in the College is clustered around the scientific foundations of computing and algorithms; the engineering of complex, high performance, reliable, and secure computing systems; the nature and quality of collaborations between humans and computing systems; and the use of computational methods to understand, predict, and affect biological and human systems. By design, the College's research is driven by a balance between an unbounded curiosity for fundamental questions and an urgent sense of mission to affect the important issues we face as a society. Cross-pollination between the researchers and the disciplines is highly encouraged and supported. This is what led, for example, to the creation of the School of Data Science, a school grounded in CCI and composed of faculty from other university colleges interested in the application and use of data analytics in a wide range of applications from genomics to political science, criminal justice, misinformation detection, to education.

The College has more than 20 faculty members whose primary area is Artificial Intelligence (AI). Research in AI includes machine learning foundations and applications,

THE COLLEGE OF COMPUTING AND INFORMATICS (CONT.)

natural language processing, computer vision, robotic collaboration, augmented reality, visualization, and high-performance computing. Our research is supported by NSF, NIH, DOE, DoD, NASA, DoEd, among others. The College, through the School of Data Science, runs an annual conference on data analytics, highly attended by the local fintech and other industries. CCI has partnerships in AI with the Electric Power Research Institute, Intel, Lowe's, Wake Forest University Health Sciences, and Duke University Medical Center.

For more than 20 years, cybersecurity and privacy has been a cornerstone of CCI's education and research. CCI was one of the first colleges to obtain the designation of Center of Academic Excellence in Cyber Defense Education and Research by the National Security Agency in recognition of the wide range of cybersecurity educational programs and cutting-edge research conducted by its faculty and students to enable industry and government professionals to protect their organizations from cyber threats. CCI hosts an annual symposium in Cybersecurity every fall, attended each year by more than 700 professionals.

In line with the national trend towards cross disciplinary research with a focus on impact, CCI has been growing its research imprint and collaboration as measured by the number of collaborative proposals, the number of ongoing collaborations with other disciplines, and the focus on mitigating current and future risks. The relevance and impact of the research of our bioinformatics faculty in understanding the genetic signatures of viruses and their mutational trajectories came to full light during Covid-19 epidemics and reinforced the need to redouble these areas of focus. The application of their work to wastewater testing in student living spaces was featured in the New York Times in 2020. One of the new

interdisciplinary research awards is the site of an NSF Engineering Research Center (ERC), where the faculty in the Department of Bioinformatics and Genomics are a major partner to the NSF Precision Microbiome Engineering (PreMiEr).

CCI is a founding member of the Center for Computational Intelligence to Predict Health and Environmental Risks (CIPHER), to understand, prevent, and combat disease outbreaks, drawing on the creativity of researchers across the University to advance vital outcomes. Through CIPHER, experts in computer science, bioinformatics, biological sciences, mathematics, geography, public health, education. and communications use computational and empirical research to counter the spread of infectious diseases and address antibiotic resistance, food safety, and ecosystem health.

Related to Cybersecurity, CCI is the home of the Center for Identification Technology Research (CITeR) and Center for Energy Security and Reliability (CESAR). CITeR is the National Science Foundation Industry/ University Cooperative Research Center (IUCRC) focusing on serving its affiliates in the rapidly growing areas of identity science and biometric recognition. It is moving to UNC Charlotte as its home institution in 2025. CESAR develops novel solutions to complex problems at the intersection of cybersecurity and energy systems. CESAR researchers pioneer cybersecurity frameworks for power grids to optimize the integration of distributed energy resources, encompassing both technological innovation and policy implementation.

Most recently, in 2023 two pilot interdisciplinary centers have been established: the Al Center for Human Digital Twins and Computational Health (Al4Health) and the Center for Environmental Monitoring and Analytics.



THE ROLE

The ideal candidate for this position is a highly motivated active researcher with an international reputation for research excellence and demonstrated leadership in interdisciplinary, convergent, or collaborative research programs. Candidates who developed their research programs at academic institutions, government, or industry labs are welcome to apply.

The College is interested in candidates with expertise in the areas of cybersecurity, privacy and human data analysis, infrastructure security, emerging threats with Al and quantum computing, or areas closely related thereto.

The hired candidate is expected to:

- contribute to the advancement of cybersecurity and related fields by maintaining an internationally recognized collaborative program of sponsored research;
- develop and lead interdisciplinary, convergent, or collaborative research projects;
- provide leadership and collaboration opportunities with industry and government organizations engaged in cybersecurity and related fields;
- supervise students and mentor postdoctoral fellows and early-career faculty;
- participate in undergraduate and graduate education and inspire students for roles in cybersecurity; and
- take a prominent role in professional service, college, and university affairs.

QUALIFICATIONS

We seek candidates who bring the following skills and experiences:

- Demonstrated record of extramurally-funded research (including current research) and peer-review scholarship related to contemporary issues in areas of interest:
- Evidence of strong collaborative engagement with industry and government partners;
- Demonstrated ability to develop and lead collaborative, high-impact research that expands the breadth and depth of the research portfolio;
- Evidence of effective teaching and mentoring of students;
- Evidence of contributions to professional service and department, college, and university affairs.

The candidate must hold a Ph.D. in Computer Science or a related discipline. The candidate is expected to have a demonstrated impact at the Associate or Full Professor level. Appointees at the Full Professor rank will receive the title Distinguished Professor, those at the Associate Professor level will receive a Distinguished Scholar title.

Hiring current Associate Professor as a Full Professor is possible, with the necessary experience and qualifications. Other "rising stars" are also encouraged to apply. The successful candidate will hold their faculty position within the Department of Software and Information Systems (SIS) in the College of Computing and Informatics (CCI).





APPLICATIONS AND NOMINATIONS

Academic Search is assisting the University of North Carolina at Charlotte in this search. Prospective candidates may arrange a confidential conversation about this exciting opportunity with one of the two senior consultants:

Dr. Cynthia Patterson (Cynthia.Patterson@ academicsearch.org)

Dr. Maria Thompson (<u>Maria.Thompson@academicsearch.org</u>)

Please include a copy of your CV to inform the conversation.

To apply, a candidate should submit the following (in 2 separate PDF documents) to <u>UNC-CyberSecurity@</u> academicsearch.org:

- A letter of intent addressing how the candidate's experiences match the position responsibilities and qualifications outlined in this profile.
- · A current curriculum vitae.

For full consideration, applicant materials should be submitted by **Monday**, **February 10**, **2025**.

When submitting a nomination, please send the nominee's full name, position, institution, and email address to UNC-CyberSecurity@academicsearch.org.

As an EOE/AA employer and an ADVANCE Institution that strives to create an academic climate in which the dignity of all individuals is respected and maintained, the University of North Carolina Charlotte encourages applications from all underrepresented groups. The candidate chosen for this position will be required to provide an official transcript of their highest earned degree and submit to a criminal background check.

ABOUT ACADEMIC SEARCH

Academic Search is assisting the University of North Carolina Charlotte in this work. For more than four decades, Academic Search has offered executive search services to higher education institutions, associations, and related organizations. Academic Search was founded by higher education leaders on the principle that we provide the most value to partner institutions by combining best practices with our deep knowledge and experience. Our mission today is to enhance institutional capacity by providing outstanding executive recruitment services, executive coaching, and transition support, in partnership with our parent organization, the American Academic Leadership

Institute.





