College of Computing & Informatics (CCI)

Introduction

Academic Departments

- **Computer Science**
- **Software and Information Systems**
- **Bioinformatics and Genomics**
- **School of Data Science**

Degrees Offered

- B.S. and B.A in Computer Science
- B.S. in Data Science
- M.S. in Computer Science, Cybersecurity, Bioinformatics and IT
- P.S.M. in Data Science and Business Analytics, Health Informatics
- Ph.D. in Bioinformatics and Computing and Information Systems

UNIVERSITY OF NORTH CAROLINA
CHARLOTTE
COLLEGE OF COMPUTING AND INFORMATICS
cci.charlotte.edu

Vision

A World with Equity in Computing and Humanity in Technology.

Mission

To empower people to shape the future through computing education, research, and engagement.
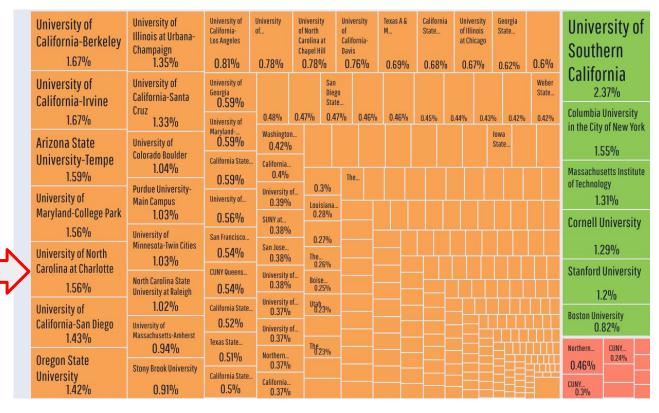
Guiding Principles

- To acknowledge inequity and do everything in our power to address it
- To take responsibility for the ethical implications of computing in everything we do
- To value intellectual curiosity at the service of scientific knowledge and sustainable progress

UNIVERSITY OF NORTH CAROLINA
CHARLOTTE

#6 nationally in the number of Computer Science graduates (BS, BA, MS, PhD)

Quality + Scale = Impact

Why Computer Science or Data Science?

NC IT JOB POSTINGS / PAST 13 MONTHS

NCTECH Association

*Reporting as of 2/14/23 – Ongoing data updates/revisions may cause fluctuation in job numbers contained in previous monthly reports

Jan'22	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'23
34,769	35,634	36,136	36,566	40,469	36,778	31,778	32,075	35,614	38,511	32,734	32,190	30,116

Data pulled from NC IT Job Trends Report produced by North Carolina Technology Association
919-856-0393 / **nctech.org**

College of Computing and Informatics

Only at Charlotte,

- … can you choose between 10+ Computer Science study concentrations;

- … can you receive undergraduate degree in Data Science or a certificate in Sports Analytics;

- … can you combine computing with human health and wellbeing through bioinformatics and genomics concentration;

- … can you be at the forefront of the new generation of AI, creative Artificial Intelligence;

- … can you receive a Masters degree in cybersecurity in only 5 years after high school;

- …

CCI is a Leader in Innovation and Talent Development

Innovative pedagogical standard

- Embracing Agile methods
- Project based learning
- Design Thinking approach to engagement
- Use-inspired research

A vibrant and inclusive community

Access to resources and support

Real-world projects and internships

Internationally Recognized Research

- Cyber Security and privacy
- Artificial Intelligence and data science
- Visualization and visual analytics
- Robotics, computer vision
- Human-centered computing
- Bioinformatics and biotechnology
- Computer science education
- High-performance and cloud computing

Engage at the forefront of the new generation of AI

UNIVERSITY OF NORTH CAROLINA
CHARLOTTE

Flavors of CS @ CLT

B.S. in Computer Science

- AI, Robotics, and Gaming
- Bioinformatics
- Data Science
- Software, Systems, and Networks*
- Cybersecurity
- Software Engineering
- Web and Mobile Applications

B.A. in Computer Science

- Bioinformatics
- Human-Computer Interaction
- Information Technology*

B.S. Data Science

Student Engagement in CCI at UNC Charlotte

- Starts Before Entering University
- Key to Success
- Serves the STEM Community
- Provides Practical Experiences
- Helps Students Find and Follow Path
- Opens Doors

Pre-College Examples

- Open House and Admitted Students Day
- Involvement in STEM activities and events at school
  - Ex: Nat. Science Foundation program for Coding at Northridge Middle School
- Charlotte Science and Engineering Fair
  - February 2023
- University Transition Opportunities Program (UTOP) and 49er Intensive Transition

UNIVERSITY OF NORTH CAROLINA
CHARLOTTE

Engagement as a Key to Success

- Students Apply Learning
  - Active Learning
  - Build Community in Classes
  - Interactive with Instructor
  - Undergraduate Research
- Freshman Learning Community
  - Live and Learn Together
  - Strong Student Bonds
- Campus Work
  - Connecting with College Faculty and Staff
  - Working with Other Students in Major
  - Outreach to Campus Community

Serving the STEM Community

- Opportunities via Dean's Ambassadors Program
- Students in Technology, Academica, Research, and Service (STARS)
  - Fosters interest in STEM for K-12 students
  - Community Outreach
  - Promotes STEM for Traditionally Underrepresented Groups
- Computing Leaders Seminar (course)
- Center for Education Innovation
  - Promotes efforts of STARS and NC Tech Association
  - Organizes On-campus Events for K-12 students
  - Promotes research and innovations in teaching at Charlotte

Practical Experiences Through Clubs and Organizations

- Over fifteen CCI Clubs and Organizations
  - Associate of Computing Machinery and Association of Computing Machinery-Women
  - Girls Who Code
  - Game Developers Club
  - National Society of Black Engineers
  - App Ventures
  - Club for AI Research
- 49th Security Division
  - Large Cybersecurity Club
  - Competes in Ethical Hacking Events
  - Wins Regularly
- Charlotte Hack
  - Software Development Club
  - Gives Students Practical Software Development Experience
  - Competes in Software Development Projects and Wins Regularly

PEARL HACKS

Advising and Student Development Services in CCI

- Advisors Assist Students with Establishing a Strong Foundation
  - Helps Develop Graduation Plan
  - Keeps Students on Track
  - Encourages Engagement (social, academic, research)
  - Promotes Opportunities for High Level Scholarship
  - Makes Referrals to Resources on Campus
  - Assists Students with Career/Internship Planning
- CCI Organized with Student Development Professionals and Faculty Advisors
- Major and Concentration Planning Starts Now
  - Two Degrees
  - Ten Major Concentrations

Business Partners Program

Create Connections & Relationships
- CCI Undergraduates and Graduate students
- CCI Leadership, Faculty & Staff
- Prospective Interns and Future Graduate Hires
- Broader University Contacts

Help CCI Students with
- Mock Interviews
- Resume Building
- Career Fair Prep
- Building their Brand

Engage in Weekly Events
- Tech Talks on Relevant Topics
- Meet the CCI Students
- Quarterly Treks to Your Business
- Fall and Spring CCI Exclusive Career Fairs

STRIKE GOLD

CHARLOTTE
COLLEGE OF COMPUTING AND INFORMATICS

Mentoring Program

- A CCI program geared to **developing and fostering mentor/mentee relationships**
- **Benefits**
  - Builds **soft skills**
  - Start and **sustain professional relationships**
  - Teaches how to be **strong communicators**
  - Develops **mentoring as life skill**
  - Creates **self awareness**
  - Encourages **professional and personal growth**
- Student led program facilitated by two undergraduate assistants

Shape What's Next in
CCI at Charlotte

Thank you