Christine I. Mendoza

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EDUCATION

University of North Carolina at Chapel Hill   *May 2024*
Bachelor of Science - Computer Science, Public Health (Nutrition); Minor - Chemistry | **GPA:** 3.9/4.0
Relevant Coursework: Distributed and Concurrent Algorithms (Graduate, S23), Files and Databases (S23), Linear Algebra (S23), Digital Logic, Algorithms & Analysis, Models of Languages & Computation, Modern Web Programming, Computer Organization, Systems Fundamentals, Data Structures, Discrete Structures (H), Nutritional Biochemistry (S23), Anatomy and Physiology, Analytical Chemistry (H)

Central Piedmont Community College   *Jul 2020*
Associate of Science - Computer Science and Math Pathway | **GPA:** 4.0/4.0
Relevant Coursework: Multivariable Calculus, Differential Equations, Public Speaking, Developmental Psychology

SKILLS

- Certifications: SAS 9.4 (Certified Specialist - Base Programming), Apollo GraphQL (Graph Developer - Associate)
- Technical Languages: (*Intermediate*) Python, Java, C, JavaScript, TypeScript, HTML, CSS, Verilog
- Frameworks/Tools: (*Intermediate*) Python Flask, MEAN stack, React, Spring Boot (REST), Jupyter, Vivado
- Languages: (*Intermediate*) Spanish, Tagalog

RESEARCH

Department of Computer Science, UNC Chapel Hill
Open-Source Accessibility: The Polaris Project for Accessible Campus Directions   *Jan 2022 - Present*
- Spearhead an initiative to develop a framework for universities/organizations to develop campus maps that crowdsource data on accessible routes and potential obstacles utilizing **MongoDB**, **Express**, **Angular**, **Node.js,** and **OpenStreetMap**
- Communicate with faculty, administrators, and students across multiple departments for product development, design input and awareness, and development of a corresponding iOS client
- **Invited talks:** SAS Institute Accessibility Exchange *(July 2022)*

Augmentative and Alternative Communication, mentor: Dr. Gary Bishop   *Aug 2022 - Dec 2022*
- Aided in feature development, testing, and bug fixes for the Open-Source Design and Programmer Interface (OS-DPI), an application to allow non-programmers to develop new augmentative and alternative communication interfaces
- Created onboarding materials and developer's documentation for OS-DPI

Micro:bit Voice Classification, mentor: Dr. Samarjit Chakraborty   *Jan 2022 - May 2022*
- Collaborate with other undergraduate/graduate students to develop a voice-activated electrical plug with on-device natural language processing utilizing **micro:bit** hardware, **C++**, **Python**, and **TensorFlow Lite**

Teacher Report Automation, mentors: Dr. Gary Bishop & Dr. Karen Erickson   *Mar 2021 - Jan 2022*
- Prototyped an open-source Google Drive extension utilizing **JavaScript** and **Google Apps Script** for automatic generation of personalized class forms for the State of Iowa's K-6 Early Literacy Alternate Assessment system.

Departments of Biology & Chemistry, Central Piedmont Community College
A Comparison of Natural Substances to Combat CAUTIs, mentor: Dr. Shuangying Yu   *Dec 2019 - Mar 2020*
- Designed and conducted an independent study to counter biofilm growth on catheters; analyzed count data using **R**
- **Competitions (Awards)**: UNCC NCSEF Region 6 (3rd place Biological Science A), NCSAS State Competition (Honorable Mention HS Biological Science - Advanced)

WORK EXPERIENCE

SAS Institute (Education Division), Cary, NC
Year-Round Technical Intern, EVAAS (Education Value-Added Assessment System)   *May 2022 - Jan 2023*
- Designed a system for language-agnostic code templating with **React**, **GraphQL**, **Spring Boot (REST)**, and **SQLite** to automate generation of custom client scripts
- Represented front-end web development team in cross-team discussions regarding client requirement management

Year-Round Technical Intern, GAP (Global Academic Programs)   *May 2021 - May 2022*
- Streamlined the exploration of over 600 datasets in SAS Viya for Learners by creating software with **Python Flask**, **SASPy**, and **SAS 9.4** to naïvely cluster unstructured text data and automate the generation of data analysis documents
- Managed content and supported design of the SAS Viya for Learners Data Repository, which surfaces over 100 data analysis documents and received 1.7K total views/month from 1.5 users in 64 countries within 4 months of creation
- Collaborated with SAS instructors to develop solutions for classroom activities on SAS Visual Analytics and **SAS 9.4**

Department of Computer Science, UNC Chapel Hill

Instructional Assistant, COMP 110 (Intro to Programming and Data Science)   *Jan 2021 - May 2021*
- Provided one-on-one support to 600 students of varying skill levels over video conference (4 hours/week) and email in collaboration with 50 other instructional assistants
- Tutored students on topics such as programming fundamentals, data analysis with **Jupyter** and **NumPy**, algorithm development, and **Python** syntax; debugged code; graded assignments and provided personalized feedback

PROJECTS

Pearl Hacks, UNC Chapel Hill

Left for Bread   *Feb 2023*
- Implemented and integrated **Flask** endpoints and **Angular** components for a full-stack website (**PostgreSQL, Edamam API, Flask, Angular, Bootstrap**) that suggests recipes that optimize grocery use based on history
- Tutored teammates in the principles of modularized web development and usage of Flask; assisted in API research
- **Awards:** Best Use of CockroachDB (Pearl Hacks 2023)

Department of Chemistry, UNC Chapel Hill

Simple Proteomics Tools   *Nov 2021*
- Launched a website to automate aspects of analytical chemistry research on proteins with **Heroku**, **Flask**, **Pyteomics**, **HTML**, **CSS**, and **JavaScript**

Capital One Software Engineering Summit Hackathon

What's in Your Fridge?   *Jan 2021*
- Directed a team in creating a web application to log a user's stock of food items based on image analysis of grocery receipts, provide personalized recipe recommendations, and track grocery expenditures
- Implemented initial computer vision backend using **Python Tesseract** and Azure Cognitive Services

COMMUNITY SERVICE

University of North Carolina at Chapel Hill

Ambassador, Computer Science Experience Lab   *Jan 2023 - Present*
- Welcome, orient, check-in, and answer infrastructure questions of students in the coworking space 3 to 4 hours a week
- Help announce staffing changes, upcoming workshops, and club/department events to undergraduates in the major
- Provide feedback and suggestions to improve department infrastructure for undergraduates

Leader, Journey Christian Fellowship   *Aug 2022 - Present*
- Lead weekly Bible studies, plan and coordinate fellowship events, and mentor 5-10 students in discipleship
- Manage finances, create publicity materials, and maintain organization documents.

Secretary, Tar Heels at the Table   *Oct 2021 - Present*
- Advocate for accessibility to university administration by synthesizing personal experience with data from students, faculty/staff, and family to identify problems/solutions; advise university-wide efforts to survey students on disability
- Create and maintain meeting notes, publicity materials, organization website, and online resources on SharePoint

Treasurer, Nutrition Coalition (Department of Nutrition)   *Jul 2020 - Aug 2022*
- Coordinate finances and communication for annual department-wide t-shirt fundraiser with 60 to 120 donors
- Lead budget creation and automate financial data summarization and analysis using **Python**, **JavaScript**, and Excel

Volunteer Intern, Carolina Hunger Initiative   *Dec 2020*
- Lectured and facilitated class discussions with a team delivering free, online nutrition lessons to low-income caregivers.
- Worked to expand the program's audience from the Triangle into Charlotte by sharing program flyers with connections

Central Piedmont Community College

Co-Founder & President, Student Researchers in Science   *Aug 2019 - Aug 2020*
- Increased access to resources and mentoring for students to conduct research in STEM fields

- Collaborated with club officers to establish the club and write the constitution; developed the club's mission
- Promoted the club in cooperation with CPCC faculty, increasing club membership from 1 to over 40

COMMITTEES
University of North Carolina at Chapel Hill
- University Teaching Awards, 2023

HONORS
University of North Carolina at Chapel Hill
- Dean's Lister, 2020, 2021, 2022
- Charles H. Dunham Scholarship (Department of Computer Science), 2022
- Tapia Conference Scholarship (Department of Computer Science), 2022
- Pulso Scholar (Carolina Latinx Center), 2021
- Whitaker Carolina Scholarship, 2020

Central Piedmont Community College
- President's Lister, 2018, 2019, 2020

Myers Park High School (Charlotte, NC)
- Valedictorian, 2020
- National Merit Finalist, 2020
- Burger King Scholarship, 2020