George Harris

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EDUCATION

University of North Carolina - Chapel Hill – GPA: 3.79/4 Chapel Hill, NC
Bachelor of Science in Computer Science, Bachelor of Arts in Mathematics, Minor in Statistics *2022 – 2026*
Relevant Coursework: Computer Organization, Systems Fundamentals, Data Structures and Analysis, Foundations of Programming, Discrete Mathematics, Math for Data Science, Linear Algebra, Intro to Probability, Calculus I & II
Organizations: Carolina Choir, ACM UNC, CS+Social Good, Biokind, Student Gov Executive Branch, AI@UNC, Busi-Tech
Awards and Experiences: Best Junior Hack - HackNC 2022, MongoDB Next-In-Tech Invitational Summit - 2024

PROFESSIONAL EXPERIENCE

Software Engineer - Internship May 2024 – Present
Momentus Technologies *Remote*
- Converted client views in event management platform from Vue 2 to Vue 3, affecting customer experience for 60,000 corporate clients in event management. Wrote reliable, maintainable test suite using Vitest and Jest and Dockerfiles for microservice containerization. Implemented GitHub actions to ensure testing is run on future builds.
- Refactored HTML/Template to PDF service and data pipeline, reducing PDF render times by 42%, leveraging Puppeteer and Cheerio for PDF generation and HTML DOM editing. Rebuilt C# options factories to conform to new data models. Migrated Vuex data stores to Pinia for consistent global state management.

Undergraduate Researcher Dec 2023 – Present
University of North Carolina *Chapel Hill, NC*
- Researched WIFI CSI and deep learning for medical applications as a member of the AURA Project under Professor Shahriar Nirjon and Ph.D. researcher. Built analytics dashboard from the ground up for use at FSU and UTSA Schools of Nursing.
- Created custom Next.js frontend and data processing service using JS, MongoDB with Chart.js for a technical patient study. Leveraged Vercel server functions for increased render and chart performance. Designed API handling over 28800 data points in under 3 seconds for any selected day.

Founding Analyst Aug 2023 – May 2024
Biokind Analytics – University of North Carolina *Chapel Hill, NC*
- Worked alongside other founders to develop the UNC Chapter of Biokind Analytics, a nonprofit student organization using analytics to draw insights for healthcare partners including 24Foundation and Cancer Services. Analyzed and visualized demographic data of 1258 marathon runners using Python, boosting participation rate among target groups by 12% YOY.

Software Engineer - Internship May 2023 – Aug 2023
TradePending *Remote/Carrboro, NC*
- Shipped features as the primary engineer for a dashboard facing over 3000 dealership clients, built in React and using Redux Toolkit for global state management. Worked alongside UI/UX designer to create mocks and design pages. Implemented RESTful RTK Query API with a MongoDB database, optimized to reduce excess data transfer by 23%.
- Took 6+ features from mock-ups all the way to production, including user management, billing/contracts management, user settings. Ensured secure user role validation for data access, and designed dynamic menus based on user authorization.

LEADERSHIP

Treasurer Jan 2024 – Present
ACM at Carolina *Chapel Hill, NC*
- Raised over $1000 to enable various networking and enrichment events for ACM at Carolina members, submitted budget requests and worked with the UNC CS department to arrange funding. Served as a member of the Executive Board.

Education Team Instructor/Executive Board Member Jan 2024 – Present
CS + Social Good UNC *Chapel Hill, NC*
- Instructed 50+ students in hands-on development with TypeScript, React, PostgreSQL, and Supabase using GitHub Classroom. Orchestrated impactful member events as a member of the board and streamlined new member training. Performed interviews for new executive members. Formerly served as a Lead Frontend Developer.

PROJECTS

RiceSavers – HackNC 2022 Project | Github | *Python, Jupyter, HTML, Javascript, Keras, TensorFlow, Yarn* Nov 2022
- Engineered and deployed a TensorFlow and Keras computer vision model to detect disease in uploaded images of rice crops with over 80% success rate. Built a simple HTML and JS front end with image submission. Awarded Best Junior Hack 2022.

Personal Portfolio – GeorgeHarris.tech | *Typescript, NextJS, TailwindCSS, Vercel*

TECHNICAL SKILLS AND AWARDS

Languages/DBs: Java, Python, C, JavaScript, HTML, CSS, TypeScript, C#, SQL, Supabase, RavenDB, MongoDB, Postgres
Frameworks: React, Vue, RTK Query, Next.js, TensorFlow, Keras, Pytorch, Pytorch Lightning, TailwindCSS
Development Tools: Github, Docker, Linux, VSCode, IntelliJ, Webstorm, Rider, Jira, Trello, Figma, Google Colab, Jupyter Notebook, Maven, Vercel, Heroku, MondoDB Atlas and Compass, Postman, AWS Cognito, AWS IAM, NuGet, Node.js, NPM
Libraries and Packages: Mongoose, Pandas, NumPy, Matplotlib, SKLearn, Chart.js, JUnit, JavaFX, Cheerio, Puppeteer