

Zane Harrison

Email: zanelh4445@gmail.com | +1 (903) 258-4445 | [LinkedIn](#) | [GitHub](#) | [Personal Website](#)

EDUCATION

Duke University, Durham, NC **GPA:** 3.91 / 4.00 (Dean's List) **August 2020—May 2024**

Major: Bachelor of Science in Computer Science; Concentration: Software Systems

Relevant Coursework: Server-Side Web Applications, Data Structures and Algorithms, Databases, Introduction to Computer Systems, Introduction to Data Analysis, Algorithm Design and Analysis

TECHNICAL SKILLS

Languages: Python, Java, C, SQL, JavaScript, HTML, CSS

Frameworks/Technologies: React.js, Next.js, Docker, GraphQL, PostgreSQL, GitHub, Ruby on Rails, Phoenix

WORK EXPERIENCE

Software Engineer Intern, *Bloomberg L.P.*, New York, NY **June 2023—August 2023**

- Rebuilt a Bloomberg Philanthropies website using the [Next.js](#) framework, [WordPress APIs](#), and [GraphQL](#), making use of static site generation and server-side rendering to decrease page load time
- Built a CI/CD pipeline that uses [webhooks](#) and [Dockerized services](#) to automatically trigger site rebuilds and redeploys with the click of a button, facilitating easier site updates

Back-End Software Engineer Intern, *Internal Revenue Service*, Remote **June 2022—August 2022**

- Configured the data storing procedures ([SQL](#)) for a Java Spring Batch application to achieve compatibility with the structural changes of a [Postgres relational database](#)
- Redesigned database schema to reduce the need for table joins, increasing performance

Technical Research Fellow, *Bass Connections*, Durham, NC **August 2021—May 2022**

- Designed [Java](#) programs to analyze datasets using bioinformatic analysis and visualization techniques to understand the interplay between marine microbial communities and environmental processes

Software Engineer Intern, *Code+ Program*, Durham, NC **June 2021—August 2021**

- Programmed and designed computer-generated, first-person explorable worlds from medieval maps of cities and fortresses using the [Houdini 3D modeling software](#) and the [Unreal game engine](#)
 - Managed shared files, developed digital assets, and modeled the terrain and structures for the scenes
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PROJECTS

Goal-Tracking Web App **April 2023**

- Developed a web app using [Ruby on Rails](#) that allows users to track and monitor their personal goals
- Added support for users and authentication and connected the app to a [Postgres database](#)

Project Team Member, *Duke Conservation Tech* **September 2020—March 2022**

- Collaborated with a team of five undergraduate students to design, program ([C++](#)), and construct an energy-saving, variable-opacity algae window

Link Strand DNA Model **March 2021**

- Programmed an interface ([Java](#)) that uses an internal linked list to model recombinant DNA
- Optimized methods to achieve greater efficiency than string-based models

Clever Hangman Game **October 2020**

- Utilized greedy algorithmic design to program ([Python](#)) an intelligent Hangman game
- Modified program to anticipate and respond to user's letter guesses to increase the game's difficulty