# **Zane Harrison**

Email: zanelh4445@gmail.com I +1 (903) 258-4445 | LinkedIn I 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—Present

- Rebuilding a Bloomberg Philanthropies website using the Next.js React framework and GraphQL
- Piloting a development workflow that utilizes server-side rendering to improve search engine optimization while automating the deployment process via webhooks, Docker and WordPress APIs

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
- Modernized data infrastructure to assist in attaining an anticipated 20% decrease in database volume

**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
- Identified 100+ unique gene clusters and compiled findings for use in a future academic publication

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

#### **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, 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