

# Jason Zheng

Ft. Lauderdale, FL • 954-854-3176 • jason.zheng84@gmail.com • <https://jason-zheng.up.railway.app/>

## EDUCATION

### Davidson College

Bachelor of Science in Computer Science

GPA: 3.517

Davidson, NC

Graduated May 2023

**Relevant Coursework:** Analysis of Algorithms, Game Development, Data Structures, Computer Organization, Discrete Structures, Theory of Computation, Computer Graphics, Intro to Computer Science

**Honors & Awards:** Posse Foundation Full-Tuition Leadership Scholarship (2019-2023), Bonner Scholar

## RELEVANT PROJECTS

### Up and Coming Artist Recommender Website

*Recommends up and coming artists (Python, Javascript, Handlebars.js, HTML/CSS, Node.js, Express)*

- Leveraged **JavaScript** to implement asynchronous and await requests for retrieving data from the Spotify API
- Collaborated with two teammates to create a **machine learning algorithm** in **Python**, which analyzed user preferences including top artists, genres, and related artists from Spotify data to recommend emerging artists
- Demonstrated effective version control and collaborative skills by utilizing **Git** and **GitHub** to manage project versions and collaborate seamlessly with team members

### Rico's Lab

*Recommends a recipe (Javascript, Handlebars.js, HTML/CSS, Node.js, Express)*

- Leveraged the ChatGPT API in conjunction with asynchronous and await requests to dynamically generate personalized recipes based on user input
- Integrated with the **MongoDB** Atlas API to establish a robust database for storing user-generated recipes, while employing **jQuery** for efficient retrieval and presentation of recipes based on user search queries
- Employed **Handlebars.js**, **HTML**, and **CSS** to craft an engaging and user-friendly **frontend**, ensuring an intuitive and visually appealing recipe generation platform
- Utilized **Figma** to design and iterate on various user interface pages, ensuring a user-centric and aesthetically pleasing design for the application

### Neuroevolutionary Model

*A neural network that teaches itself Joust (Python, TensorFlow, matplotlib, pettingzoo)*

- Employed **TensorFlow** and **Python** to develop a neuroevolution program, featuring a neural network capable of monitoring both players within a single game of Joust, demonstrating proficiency in machine learning and game development
- Utilized a comprehensive set of libraries including **Skimage**, **Matplotlib**, **NumPy**, **Gym**, **PIL**, **OpenCV (cv2)**, and **PettingZoo** to replicate and simulate the Atari game environment, enabling detailed result tracking and analysis

## WORK EXPERIENCE

### Davidson T&I

T&I Network Engineer

Davidson, NC

May 2021 – May 2023

- Developed a **Python**-based tool that automated the filling of information for switch configurations, significantly reducing workload and time expenditure for colleagues and team members
- Utilized a **command-line interface** and **secure shell (SSH)** to efficiently provision and configure 137 network switches, resulting in comprehensive updates that significantly boosted network performance. This enhancement led to improved network efficiency and reliability, benefiting approximately 2000 students
- Collaborated with coworkers to conduct in-depth Wireless Access Point (WAP) density assessments by utilizing various high-capability Wi-Fi antennae, ensuring seamless network availability across a diverse range of devices.

### Forum One

Software Engineer Intern

Remote

June 2022 - August 2022

- Gained practical expertise in **full-stack development** for enterprise-level applications, encompassing both **front-end** and **back-end development**.
- Proficiently wrote, tested, and managed code repositories utilizing tools such as **Git**, **GitHub**, **WordPress**, and **Drupal**, ensuring efficient development workflows and code version control
- Introduced to **SCRUM methodologies** to conceptualize, design, and execute innovative features within a web-based application, fostering a collaborative and agile development environment

## TECHNICAL SKILLS

- Programming Languages: Java, Python, JavaScript, C#, HTML, CSS
- Frameworks: React, MongoDB, Express, Node.js