# **Brian Stokes**

## **Software Engineer with Data Experience**

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### **SKILLS**

Programming Languages: Python, Javascript, HTML, CSS
Frameworks / Tools: Docker, React, Redux, Node.js, Express.js
Data Management & Cloud Services: MySQL, PostgreSQL, SQL, AWS

#### **EDUCATION**

App Academy

July 2023 - December 2023

Immersive software engineering bootcamp focused on full-stack web development

Relevant topics: Pair Programming, Object Oriented Programming, Responsive Design, Object-relational Mappers

### University of South Carolina, Columbia

July 2015 - May 2021

Bachelor of Science in Biochemistry and Molecular Biology

Relevant coursework: Calculus, Vector Calculus, Differential Equations, Web Development, Thermodynamics, Fluid Mechanics

#### HIGHLIGHTED PROJECTS

**SavoryScoot** | (React / Redux, JavaScript, Python, Flask, Docker, Render, CSS, AWS S3, Google Maps API) Food delivery app inspired by UberEats live | GitHub

- Enhanced user experience through integration of **Google Maps API**, allowing users to visualize restaurant location and view nearby establishments.
- Utilized **Boto3** library to automate file uploading/deletion processes to **AWS** and ensured secure connection through client creation and authentication.
- Implemented **Flask** for routing and HTTP request handling, optimizing data flow and ensuring efficient communication between frontend and backend servers, facilitating a smooth and responsive application.
- Guided the team in adopting **Agile** methodologies, establishing a robust **Git** workflow. Facilitated streamlined collaboration via Git and pull-requests, preemptively resolving conflicts to ensure a unified and efficient development cycle.

**SportHub** | (React / Redux, JavaScript, Python, Flask, Docker, SQLAlchemy, CSS, AWS S3)

live | GitHub

- eCommerce app where users can buy and sell sporting goods
- Engineered and structured a robust database architecture using **SQLAlchemy**, proficiently managing schema alterations and versioning seamlessly through **Alembic**.
- Developed a cart modal leveraging **Local Storage** capabilities, guaranteeing the persistent storage of cart data for users, regardless of login status or database resets thus enhancing the user experience.
- Strengthened database and application security through applying **CSRF** protection and **Flask-Login** and crafted additional database validation middleware through **WTForms** and various frontend constraints.
- Employed **React** for user-interface development, integrated **Redux** for streamlined state management.

#### WORK EXPERIENCE

## **Chemist - Volatiles Laboratory**

January 2022 - July 2023

#### **LGC Standards**

Former Workplace

• Directed a team of chemists, ensuring seamless workflow and timely production of reference standards while maintaining a 98%+ pass rate in quality control.

- Proactively addressed failures in a gas-mixture process through comprehensive research, implementing improvements and authoring a new procedure, resulting in substantial cost savings.
- Fostered consistent communication between QC and Shipping departments, coordinating efforts to streamline workflows and ensure prompt delivery of high-quality standards.

## **Undergraduate Research**

December 2020 - May 2021

### **McNair Aerospace Center**

- Researched diverse carbon fiber-thermoplastic production methods, analyzing their technological viability and efficiency.
- Operated and optimized a Carbon Fiber production line to create improved 3D printing material, leveraging data analysis and process enhancements.
- Engineered and implemented a solvent recycling system aimed at reducing chloroform usage throughout the production process, leveraging automation and system optimization principles.