

Brian Pak

bpak7@gatech.edu · brianpak.me · github.com/brianpak2402 · linkedin.com/in/brianpakk · 678-641-5035

SKILLS

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

Technologies: React, Next.js, Git, Node.js, Chakra UI, DynamoDB, AWS Lambda, AWS S3, AWS RDS, GraphQL, REST APIs

EDUCATION

Georgia Institute of Technology | Atlanta, GA

Expected: May 2024

B.S – Computer Science, Concentrations: Intelligence & Media

GPA: 3.42

Coursework: Data Structures & Algorithms (Java & C++), Information Visualization, Computer Organization & Programming, Object-Oriented Design, Discrete Math, Combinatorics

EXPERIENCE

Ridgeline Apps | Software Engineering Intern

June 2023 - August 2023

- Prototyped a **GraphQL**-based trade alert notification service with **Amazon SNS** and **AWS Lambda** to support over 600 traders when tending to over \$2 million in critical transactions.
- Deployed over five scalable APIs for maintaining sound effects and alert preferences using **AWS S3**, **Amazon RDS**, and **Python**, currently in use to scale the notification service to the entire application.
- Constructed the user interface for the application's trade notification settings page using **React** and **Typescript**, resulting in a seamless user experience and streamlined customization of alert preferences.

GT Robotic Musicianship Lab | Student Software Developer

January 2023 - Present

- Reconstructed the user interface from deprecated Vue to **React Typescript** for the web-interface of Mixboard, a mobile app that provides users with the ability to combine multiple song tracks.
- Integrated **HTML Drag & Drop API** to enable seamless movement of Spotify tracks when combining songs across the web interface.
- Developed the user interface using **Chakra UI**, enabling stakeholders to swiftly visualize the new interface and provide valuable feedback.

PROJECTS

Spotify Jukebox | *Next.js, React Typescript, DynamoDB, AWS Lambda*

August 2022 - May 2023

- Constructed over 17 RESTful API endpoints through **Amazon API Gateway** and **Node.js** to manage user and virtual jukebox data on a **DynamoDB** database.
- Introduced over 11 automated unit test suites using **Playwright** and **Vitest** to support the application's CI/CD pipeline, helping detect errors in new pull requests.
- Migrated the application's user interface to **Next.js**, leveraging server-side rendering techniques to reduce page-load times by 9%.
- Implemented **OAuth** Authorization Code Flow with PKCE Extension to securely verify a host user's Spotify account before beginning a music session.

BuzzConnect | *Spring Boot, React, SQL*

August 2022 - December 2022

- Spearheaded the development of the application's 20 RESTful API endpoints using **Spring Boot**, allowing successful transfer of user and event data.
- Provided a responsive design to the user interface by applying **CSS Container Queries** to the application's 4 webpages, allowing the UI to fit any screen.
- Modeled relationships between 4 functional classes using **Spring Boot JPA**, allowing the development team to easily maintain and store data in a local **MySQL** relational database.
- Leveraged the GT Places API through **Axios** HTTP client to help events to locations throughout Georgia Tech's campus.