

PROFILE

Software developer seeking full-time backend engineering position. My expertise lies in Java/TypeScript and React Native. Passionate about automation and optimizing efficient software systems. Background in engineering-research has given me an analytical approach to problem-solving, which I've successfully applied to my current freelance web development and marketing projects. Now, I'm eager to apply these skills to a software team environment.

SKILLS



**Programming Languages:** TypeScript, JavaScript (Node.js) & Python (Python Runtime)

**Frameworks/Libraries:** React Native, Redux, Jest, React Testing Library, npm, Yarn

**Version Control:** Git, GitHub (proficient in branching, merging, & pull requests)

**Databases:** SQL, Firebase Firestore

**Other Tools:** VS Code, Docker, Command Line Interface

EDUCATION

M.S., Geotech Engineering (Research Assistant)  
Georgia Institute of Technology, 2021  
Atlanta, Georgia

B.S., Civil Engineering (Undergrad Research)  
Georgia Institute of Technology, 2018  
Atlanta, Georgia

AWARDS

- H.E.R. Dao Hackathon Winner (Green Chain - 2023): **Green Chain**
- Geo-Institute (Georgia Chapter) Outstanding BS/MS Project Award (2019)
- NSF IRES global internship program at Ecole des Ponts (2019)
- Richard D. Barksdale Outstanding Undergrad. Student Research Award (2019)

Back & Front-End Developer Padel App 2024 - 2025

Assisted in the development of mobile application features for padel players, focusing on enhancing UX/UI and functionality through various components and backend integrations:

- Developed the Notification Enabling Screen using **React Native**, enabling users to manage their notification preferences while ensuring accessibility to modify settings later.
- Created the Profile/Settings Tab along with interactive switches for notifications using switch animations, and were integrated with **Async Storage** to ensure the **useState** was remembered according to user settings. Eventually helped to store these through **Firebase**.
- Refactored the Ranking Flat List Component to optimize the scroll rendering performance by enhancing FlatList properties by employing memoization with **React.memo** and minimizing unnecessary re-renders in an animation's implementation.
- Utilized TypeScript to enforce strong type definitions across components and **APIs**, ensuring data integrity while designing interfaces for **GraphQL** queries and mutations to manage user data.
- Collaborated with the development team using **Git** and **GitHub**, effectively managing **version control** workflows, resolving merge conflicts, conducting code reviews, and adhering to organized branching strategies for feature development.

Back-End & Data Analytics Just Train 2023 - 2024

Developed and prepared for open-source release a JavaScript library for analyzing form.io data, generating key statistical insights. My contributions included:

- Created a data processing module using **TypeScript** that analyzes **JSON** form submission data. This module utilizes **nested loops** and **sorting** algorithms to extract specific attributes and calculate key statistics (frequencies, percentages, etc.) for any number of submissions.
- Implementing a robust **unit testing** framework using **Jest** and adhering to Test-Driven Development best practices.
- Publishing a reusable **npm package**, demonstrating proficiency in **Node.js** and npm package management.
- Introduced to GitHub for merging, cloning, and branching.

Geotechnical Consultant Engineering Analytics 2022 - 2023

Applied advanced analytical and data management techniques to solve complex geotechnical challenges in the mining and civil engineering sectors.

- Performed **FEM analysis** (APEX and rigid pier analysis) to predict pier heave, optimizing micropile and pier lengths for cost efficiency.
- Advanced analytical techniques to solve complex geotechnical problems, developing expertise in **data structures** and **SQL** to build a GISTM-compliant **database system**.
- Managed multiple geotechnical projects, showcasing expertise in project planning, execution, and client communication.