

Brandon Song

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EDUCATION

University of Texas at Austin

Bachelor of Science in Computer Science (GPA: 3.77)

Austin, TX

December 2024

Relevant Coursework: IOS Mobile Computing, Contemporary Issues in Computer Science, Object Oriented Programming, Data Structures & Algorithms, Machine Learning, Neural Networks, Operating Systems, Computer Architecture

TECHNICAL SKILLS

Languages: Python, Java, TypeScript, JavaScript, C/C++, Swift, HTML/CSS, Assembly (AArch64, x86)

Frameworks: Django, Flask, GraphQL, Express.js, Vue.js

Development Tools: Visual Studio, Docker, PostgreSQL, MongoDB, Postman, Xcode, Git, Node.js, Jupyter, Firebase, Linux, Command line

Libraries: React, Pandas, NumPy, Matplotlib, Scikit-learn, PyTorch

EXPERIENCE

Undergraduate Research Volunteer

June 2024 – August 2024

CodeAssist | UT Austin

Austin, TX

- Collaborated on a full-stack feedback system to streamline process of autograding programming assignments for computer science courses using React, Flask, PostgreSQL, and JavaScript.
- Restructured PSQL database to centralize all users to a single table leading to improved client experience switching roles between student, teacher, and teaching assistant.
- Implemented robust REST API endpoints in Flask, ensuring reliability and performance through Postman end-to-end testing.
- Conducted thorough code reviews to ensure efficiency in production by requesting changes from peers to maintain high code quality.
- Wrote python script with unit test coverage of up to **60%** on backend endpoints using unittest and pytest libraries.

Software Engineer

May 2024 – August 2024

ChurchSearch

Austin, TX

- Developing a search platform to help streamline the process of finding a church for college students using MongoDB, Express.js, React, and Node.
- Spearheaded development of a modularized Pop-up Menu component using React and Typescript, increasing form submissions by **55%** from users.
- Integrated Twilio's messaging API to enhance user communication with confirmation texts and faster reach.
- Reduced number of requests sent to the server by **500ms** leading to a more responsive experience.
- Revamped admin interface to maintain data management using MongoDB, significantly improving the process of adding new churches.

Tech Fellow

May 2024 – August 2024

CodePath

Remote

- Managed and guided 30+ students across 3 cohorts on fundamental data structures and algorithms concepts by simulating mock technical interviews.
- Collaborated with the course instructor and peers to enhance course interaction among students, increasing participation and engagement.
- Mentored several students through tailored weekly check-ins and one-on-one meetings to support student career success.

PROJECTS

Pizza Order App | Swift, Firebase

June 2023 – July 2023

- Configured Firebase Authentication for absolute data persistence across unique users resulting in no data loss.
- Deployed the Core Data framework to add saving functionality of up to 8 pizza order drafts.
- Fixed multi-threading capabilities for asynchronous tasks, decreasing app slowness and freezing by **37%**.

tjdgkt.js | Django, GraphQL, Vue.js, CSS

May 2023

- Developed a full-stack blog web application using Django Admin on the backend and Vue.js on the frontend.
- Configured Django Admin to create data models to author and manage blog content.
- Built Vue components to display wrapped data from Django Admin by using GraphQL endpoints, providing a richer client-side experience.
- Queried GraphQL API dynamically to populate Vue components using Apollo, decreasing data retrieval processes by **22%**.