

# Joshua Tan

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## EDUCATION

**Brown University**, *B.S. Computer Science, B.A. Economics, 4.0/4.0 GPA*

Providence, RI | **Class of 2023**

- Highlighted CS coursework: Software Engineering, Computer Systems, Web & Mobile Applications, Computer Networks, Database Management Systems, Operating Systems, Distributed Systems, Deep Learning, Blockchains, Computer Vision
- Honors: Phi Beta Kappa, Omicron Delta Epsilon, Magna Cum Laude (Highest Latin honors at Brown)

## EXPERIENCES

**Rippling**, *Software Engineer Intern*

San Francisco, CA | Summer 2022

- Worked at a YC-backed Unicorn to launch a new hiring software product using Django, MongoDB and React.
- Developed key product features, mostly on the backend, such as an application-wide permission system and a central dashboard. For these features, I was given significant ownership over the development and technical design.
- Collaborated with other engineers within my team and across teams to integrate these features with Rippling's suite of products, such as the employee graph and platform-wide permissions.

**Government Technology Agency (Singapore)**, *Software Engineer Intern*

Singapore | Summer 2021

- Developed features for a government grants web portal using React and Ruby on Rails, as part of an agile team.
- Practiced Test-Driven Development, using test libraries like Enzyme and Mocha for the frontend and RSpec for the backend.
- Maintained and refactored legacy code to reduce technical debt and patch security vulnerabilities.

**Develop for Good**, *Backend Software Developer*

Remote | Spring 2021

- Collaborated with a team of designers and developers to create a mobile application for the Environmental Defense Fund that allows them to communicate and interact with their environmental activists.
- Designed and programmed a RESTful backend server using Node.js and a MongoDB database, along with documentation.

**Theme International Trading**, *Software Engineer Intern*

Singapore | Summer 2020

- Designed and developed internal software tools using the .NET framework for a quantitative trading firm.
- Programmed an application that interacts with external APIs to automate the OTC trade execution and clearing process.
- Developed an invoice management application that aggregates data from multiple sources for the firm's financial controllers.

**Full Stack at Brown**, *Software Developer*

Providence, RI | Jan 2020 – May 2022

- Full-stack developer at a student organization that develops web and mobile applications for the Brown community.
- Worked on the full-stack development of the Brown Essentials mobile application and the 1<sup>st</sup>@Brown mobile application.

## TECHNICAL PROJECTS

**tutoring.sg** | Next.js, Tailwind CSS, Node.js, MongoDB

- Commission-free matching service and two-sided marketplace for private tutors and students in Singapore.
- This was a completely solo project where I did everything, including design, development and deployment.

**Circles** | React Native, Node.js, Google App Engine, Google Datastore

- Privacy-centric social media platform with features to promote physical interactions and quality connections.
- Won the Wolfram Award at Brown University's annual Hackathon.

**13F Tracker Twitter Bot** | Node.js, PostgreSQL

- Every quarter, investment managers across the US are required to declare their positions via a 13F filing to the SEC.
- Developed a bot that automatically parses these filings and tweets out significant changes from the most prominent investors.

**Food Capture** | React Native, Node.js, MongoDB

- Mobile application platform that notifies users of any events with free leftover food with the goal of reducing food waste.
- Event organizers can create posts with pictures and broadcast them to users within a certain school campus or office building.

**First @ Brown** | React Native, Node.js, PostgreSQL

- Mobile application that allows college freshmen to connect with other freshman based on their responses to survey prompts.
- Features include a real-time chat application implemented using web sockets and authentication via school google accounts.

**Secret Shop** | React.js, Bootstrap, Node.js, MongoDB

- Web marketplace to buy, trade or sell used video games.
- Includes a chat application for users to negotiate on price and a user profile to display games available for trading.

**Coordinator** | React.js, Spark Java, SQLite

- Web application that generates optimal meeting times for a group of people based on their availability calendar.
- Application can also split users into subgroups with similar availabilities using a variation of k-means clustering.

## SKILLS

**Programming languages:** Golang, TypeScript/JavaScript, Python, Java, C, Scala

**Full stack development:** Next.js, React.js, React Native, Tailwind CSS, Node.js (Express), Firebase, Django, MongoDB, SQL, Git, Docker, Agile practices