

Brian Khoo

Web Developer | Full-Stack Engineer | Software Engineer

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TECHNICAL SKILLS

Languages: Javascript, Typescript, Python, Ruby, Java, HTML, CSS, SQL

Frontend: Next.js, React.js, React Native, Redux, Figma, Tailwind CSS, MaterialUI, Motion-Framer, Three.js

Backend: Node.js, Express, Ruby on Rails, Flask, MongoDB, Prisma.io, GraphQL, OpenAI, Sequelize

Expertise: Generative AI, Prompt Engineering, Web Scraping, Agile Project Management, Test Driven Development, Code Review

TECHNICAL EXPERIENCE

Rubbish | *Software Engineer*

May 2023 - Present

- Developed a geolocating data visualization tool utilizing ESRI, empowering community members to report litter, plastic, and graffiti incidents to the appropriate authorities and reducing litter in communities by 21%.
- Extensively tested and documented API integration, allowing users to use Rubbish Data with mapping interfaces.
- Crafted context-rich chatbots with the context of over 1000 reports, enabling users to make intuitive queries for instant responses. Utilizing Open AI's Chat GPT API and large context windows and vector databases.

Freelance | *Fullstack Web Developer*

April 2023 - Present

- **Custom Website Development:** Crafted unique websites tailored to meet individual client needs and optimizing SEO.
- **Client Collaboration:** Developed strong rapport with clients ensuring their vision and requirements are met in the final product
- **Responsive Design:** Implemented responsive design principles to ensure optimal viewing experience across various devices

PROJECTS

RecycleGPT - (Swift, OpenAI Vision, Dalle3 Javascript, Firebase) **Best Bootstrapped Org Award, GenLab Hackathon II** [Demo Video](#)

- Co-developed an recycling solution leveraging OpenAI Vision APIs and Dalle3 technology within Firebase cloud functions for high-traffic areas like airports and stadiums,.
- Executed the app into real-world scenarios by recruiting users at the hackathon to test the app. Which led to an increase of 56% improvement in recycling rates around the hackathon.
- Implemented an engaging AI Image Generation module in RecycleGPT, transforming user photos into superhero avatars using OpenAI's Dalle 3. Rewarding users with progressively heroic avatars as they sort more litter.

TrashGPT (Swift, OpenAI Vision, Javascript, Firebase) - **3rd Place, Emergency GPT Hackathon**

[Demo Video](#)

- Pioneered an IOS App developed with Swift and GPTVision AI for urban environmental management, leveraging image analysis to accurately identify, categorize, and quantify litter types and brands, improving sustainability efforts by 12.7%.

AI Workspace - (React, Redux, JavaScript, Python, Flask, SQLAlchemy, AWS, HTML, CSS, OpenAI)

[GitHub](#) | [Live Site](#)

- Devised an AI-driven note-taking and workspace application, leveraging the capabilities of AI for enhanced productivity.
- Leveraged Chat GPT 3.5/4 and backend prompt engineering to create features which include note translation, summary creation, journal topic generation, blog post drafting, code writing, and more.
- Created intuitive UI/UX design, dash boards, and efficient note-taking features allowing users to flow through the website.

Air Space - (React, Redux, Typescript, Express, Node, HTML, CSS, Prisma.io, Next.js, MongoDB)

[GitHub](#) | [Live Site](#)

- Utilized Figma to design seamless wireframes to ensure ease of testing concepts and application development
- Established a home rental and experiences website allowing users to host experiences on their property which included, calendar / booking technology, dashboards, search functions, and more.

ADDITIONAL EXPERIENCE

JP Morgan Chase | *Lead Operations Associate*

August 2020 - October 2022

- Engineered enhancements in customer retention and elevated financial product sales across bank branches by 11%.
- Oversaw daily branch operations overseeing cash entities, employee schedules, and ensure customer satisfaction.

Small Business Owner | *Import Export Business*

Sep 2018 - July 2022

- Operated an import-export business, identifying growth and sales opportunities through market research. Optimized product offerings and managed comprehensive business operations from sourcing to distribution, including marketing, and sales..

EDUCATION

App Academy, Certification: Full Stack Software Engineer / Computer Science

Southern New Hampshire University Bachelor of Science in Finance