

Jack Zhang

Full-Stack Software Engineer

DC Metro Area | JZHANG319@GMAIL.COM | [GitHub](#) | [LinkedIn](#) | [My Portfolio Site](#)

SUMMARY

Versatile Software Engineer with full-stack development and a prior business management career. A successful entrepreneur who thrived in startup environments to drive projects from system design to deployment. Skilled in Javascript, Python, and Prompt Engineering.

TECHNICAL SKILLS

Language: Javascript, Python | **Frontend:** React.js, Redux.js, Next.js, HTML, CSS, Tailwind CSS | **Backend:** Django, Flask, Node.js, Express | **Databases:** PostgreSQL, MySQL, SQL-Alchemy, Sequelize | **Other:** AWS (EC2, S3, RDS), AWS Vault, GCP, Email.js, Bcrypt, Data Structures & Algorithms, Architecture, Debugging, OpenAI, Google GEMINI AI, Stripe API

EXPERIENCE

Full-Stack Software Engineer | Coursect Inc. (Start-Up) | 12/23 - Present

- Conducted a proof of concept with Google Cloud Storage, resulting in scalable and reliable data solutions and achieving an over 90% reduction in storage costs compared to Render.com
- Developed and integrated an image-chat feature utilizing Google Gemini Pro Vision API, increasing image recognition accuracy by over 80%, enabling users to ask questions on uploaded images
- Enhanced system design by adding models and establishing associations to enable detailed tracking of user progression and the questions model to maintain question/answer data since platform enrollment
- Implemented exam feature with multiple-choice and fill-in-the-blank options, dynamically generating various question types using OpenAI API, laying the groundwork for future specific exams like the SAT and PSAT
- Enabled speech-to-text and text-to-speech features with Web Speech API (WebkitSpeechRecognition for STT and SpeechSynthesisUtterance for TTS), enhancing user interactions by empowering non-typing and non-reading users
- Resolved urgent Render deployment error after code was pushed without review prompting new employees to submit pull requests for review to mitigate future deployment issues and ensure production site stability

Software Engineer | Major HVAC Inc. (Contract Work) | 05/24 - 07/24

- Developed a full-stack website for a local HVAC company using React.js, Flask, and PostgreSQL for the database
- Integrated Email.js to handle customer questions, inquiries, and feedback directly through the website
- Managed the entire project lifecycle from development to deployment, ensuring high-quality and timely delivery

Full-Stack Software Engineer | Modern Technology LLC. (Contract Work) | 05/24 - 06/24

- Developed an SMS marketing platform enabling restaurants to sign up and send promotional codes to customers using React frontend and Flask/Python backend with a Postgres database
- Integrated 3rd party API (bird.com) to facilitate text message capabilities, optimizing efficiency and reliability
- Designed and implemented a promo code generator, ensuring that codes are specific to individual restaurants thereby preventing cross-usage and maintaining promotional integrity

Software Engineer | Sushiya Japanese Restaurant Inc. (Contract Work) | 03/24 - 04/24

- Developed a dynamic restaurant menu system utilizing CSV file integration, providing clients with a streamlined method for updating menu items instead of an outsourced content management system (CMS)
- Redesigned layout using Tailwind CSS, leveraging its built-in utilities for responsiveness, ensuring optimal user experience (UX) across various devices and screen sizes
- Engineered animated menu page with Framer Motion to encourage user interaction without increasing the load time

EDUCATION

App Academy, Full Stack Development

Completed 2023

Long Island University, Bachelor of Science in Business Management / Finance

Completed 2008