LINENG(VINCE) CAO

as Senior Software Engineer

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-- Stack

Frontend	React, Typescript, JavaScript (es6+), TailwindCSS, Radix-ui, Jest, Cypress, Babel, Webpack, Vite, Rollup, Three.js(R3F), d3.js;
Mobile	React Native, Electron, SwiftUI, Flutter;
Backend	Next.js SSR, Nodejs, Remix, Redis, Websocket, Server-Sent Events, MongoDB, PostgreSQL, GraphQL, Nestjs, Fastify;
Infra/DevOps	Github Actions, Git, Terraform, Docker, Kubernetes, AWS, Supabase, Firebase;

The Education

M.S in Computer Science at University of Southern California	<i>Los Angeles, CA</i> , <mark>Aug 2018 - May 2020</mark>
B.S. in Computer Science Major, Mathematics Minor at Kean University	Wenzbou, China, <mark>Aug 2013 - May 2017</mark>

🚰 Employment

Senior Software Engineer,

Software Engineer at DeepScribe

- As early founding engineer, designed, lead and built mission-critical practitioner portal, Twilio and Vonage telemedicine solution, early Human-in-theloop (HITL) web platform solution, serving thousands of healthcare providers nationwide daily, reducing workflow complexity while maintaining high medical note quality and efficiency rate.
- As a part of applied-ai team, collaborated with ML engineers to develop specialty-focused automated note generation solution, incorporating practitioner preferences and medical practices.
- Established robust CICD infrastructure utilizing AWS Amplify, Docker containers, and GitHub Actions, significantly improving deployment efficiency into early products lifecycle.
- Contributed next-generation iOS practitioner application using SwiftUI, expanding platform accessibility.
- Led integration of third-party vendor partnerships and developed internal tooling for customer success teams.
- Conducted technical interviews and mentored new engineering team members while maintaining code quality and managing technical debt. FreeLancer n/a
- Architected and delivered full-stack solutions using modern frameworks including Next.js, Remix, Electron, and Shopify Hydrogen.
- Successfully launched multiple public/private production websites with custom implementations for diverse client requirements, e.g. <u>//happymay.ca</u>, <u>//</u> <u>powerwell.ca</u>, <u>//angust.tw</u>, etc.

Full-stack Developer, Student Worker at USC Information Sciences Institute (ISI)

- Redesigned user interfaces for DeterLab cyber experimentation platform (DEW).
- Modernized core Python codebase by implementing RESTful architecture using Flask.

Software Development, Intern at Oracle (China)

- Enhanced authentication system for Oracle BI Liquidity Management Reporting System.
- Optimized database performance through SQL query refinement and duplicate entry management.

\left Open-source Project

Recipe Muse, /github

- Developed LLM-powered recipe generator with personalized meal planning capabilities.
- Implemented text and image models switching architecture between OpenAI, Anthropic, DeepSeek, and Stability.ai.
- Built with Next.js SSR, Redis, SSE, Supabase and Firebase Realtime Database, featuring structured JSON model outputs and multi-language support.

s3db, /npm

- Created database abstraction layer for AWS S3 with document-type storage capabilities.

use-tools, <u>/npm</u>

- Developed collection of React hooks optimizing common development workflows.

COVID-statistics, /github

Built real-time COVID-19 dashboard using Nivo, Next.js, TypeScript, and Framer-motion.

Foldable Side Panel (Chrome extension), /github

- Engineered React-based Chrome extension template with modern tech stack (Parcel, TypeScript, TailwindCSS).

💋 Publication

HCI 2017, A Highly Customizable Parent-Child Word-Learning Mobile Game for Chinese Children with Autism, <u>*link*</u> *HCI 2016,* "One Doesn't Fit All": A Comparative Study of Various Finger Gesture Interaction Methods, <u>*link*</u>

Marina Del Rey, CA, Nov 2019 - Jan 2020

San Francisco, CA, Jul 2023 - Present

San Francisco, CA, Jan 2020 - Jul 2023

Beijing, China, Aug 2016

May 2017 Jun 2016