
AKI GAO

iknowht.ml | github.com/iknowhtml | linkedin.com/in/iknowhtml

Profile

Staff software engineer with a passion for delivering delightful products that empower people, solving difficult technical problems, and optimizing productivity for remote engineering teams.

Advocate of leveraging compassionate thinking based on first-principles to drive engineering, product & leadership.

Expertise in cryptocurrency wallet, NPM package & full-stack web application development in TypeScript, with a focus web3 & accessibility.

Work Experience

Ava Labs - *Staff Software Engineer*, Remote

February 2023 - Current

- Lead the engineering effort for MPC-based institutional custody application to manage assets across Avalanche P/X chain & Ethereum Virtual Machine (EVM) chains, and collaborate cross-functionally with senior leadership, design, & security teams to drive product decisions, engineering hiring & technology/systems architecture choices.
- Work with internal finance team to manage digital assets, resulting in 98% utilization of stakeable assets for revenue generation and over \$50M in tax savings, as well as develop & maintain internal tooling to empower the finance team to operate efficiently, leading to a 20x increase in transaction generation velocity.

Coral - *Co-Founder & Lead Engineer*, Remote

September 2021 - February 2023

- Led engineering team across the stack from front end, back end and smart contract development for a digital asset marketplace for music, collectibles, events & experiences, as well as a crypto-based affiliate/referral marketing platform on the Avalanche C-Chain that received \$500K of seed investment from Avalaunch, Status & Wave Financial.
- Worked cross-functionally with co-founders to distill business requirements into product features & engineering tasks, managed 3rd-party design services for UI/UX, and coordinated project schedules, assigned tasks, and tracked progress for the engineering team to meet deliverable timelines.
- Architected and implemented platform features including low-friction social login based sign ups with non-custodial wallet creation that led to 83% of users signing up with social accounts using Web3Auth and NFT minting with credit cards via Stripe that resulted in 91% of users purchasing NFTs with credit card with Next.js.

User1st - *Solutions Architect - R&D*, Remote

January 2020 - February 2023

- Led in-code accessibility library development for 8 NPM packages including core accessibility remediation library, web framework specific packages for vanilla JS, React, Angular & Vue, and a micro-frontend based static accessibility analysis toolbar using web components & shadow DOM in React.
- Managed and automated versioning & publishing of NPM packages using TurboRepo & Lerna to reduce package deployments by 75%, and developed JWT token-based read/write access middleware for a private NPM registry using Verdaccio.
- Modernized development & build tooling, and parallelize processes across codebases to reduce development environment start up times by 95%, build times by 80%, and engineering onboarding time by 90% using TurboRepo, PNPM, Vite, Rollup & ESBUILD.

Skills

Languages:

TypeScript, JavaScript, Go, Shell

Front End Technologies & Tools:

Figma, HTML, CSS, React, Emotion/Styled Components, Tanstack Query, Tanstack Router, Redux, Zustand, Legend State, RxJS, Storybook, Next.js

Development & Testing Tools:

Git, NPM, Yarn, PNPM, Vitest, Webpack, Rollup, ESBUILD, Vite, Lerna, Turborepo, Github Actions

Back End & Infrastructure Technologies:

Node.js, Express, Docker, Kubernetes, SQL, Firebase, Vercel, Cloudflare, AWS, Google Cloud Platform

Education

The University of Virginia: School of Engineering and Applied Science (SEAS)

August 2016

- B.S. Computer Engineering & B.S. Electrical Engineering