XIAOYU (AKI) GAO

iknowhtml.github.io | github.com/iknowhtml | linkedin.com/in/iknowhtml

Profile

Staff Software Engineer with a passion for solving difficult technical problems, delivering delightful products, and leading high performing engineering teams. Expertise in full-stack web & native applications, JavaScript/TypeScript developer tooling, and NPM package development, with a focus on digital asset management, Web3 & accessibility. Proven track record of delivering performant, scalable, and secure software solutions in fast-paced, high-growth startup environments, as well as leading teams cross-functionally, fostering collaboration, and effectively bridging the gap between technical, product and business stakeholders to achieve strategic goals.

Work Experience

Ava Labs - *Staff Software Engineer,* Remote   February 2023 - Current

- Lead development for a suite of cross-platform digital asset management applications that offers secure token custody across multiple blockchains.
- Collaborate cross-functionally with senior leadership, product, business, design and security teams to drive strategy & roadmap, engineering hiring, and technology & systems architecture decisions.
- Work with the internal finance team to manage digital assets, achieving 98% utilization of stakeable assets for revenue generation and over $50M in tax savings, as well as develop and maintain internal tools to empower the finance team, resulting in a 2000% increase in transaction generation velocity.

Coral - *Co-Founder & Lead Engineer,* Remote   September 2021 - February 2023

- Led the engineering team in front-end, back-end, and smart contract development for a digital asset marketplace for music, collectibles, events, and experiences, as well as a crypto-based affiliate/referral marketing platform on the Avalanche C-Chain, which secured $500K in seed investment from Avalaunch, Status, and Wave Financial.
- Worked cross-functionally with co-founders to translate business requirements into product specifications and engineering tasks, managed third-party design services for UI/UX, and coordinated project schedules, task assignments, and progress tracking to meet deliverable timelines
- Architected and implemented features such as low-friction social login sign-ups with non-custodial wallet creation, resulting in 83% of users signing up with social accounts, and NFT minting with credit cards via Stripe, leading to 91% of users purchasing NFTs with credit cards.

User1st - *Solutions Architect - R&D,* Remote   January 2020 - February 2023

- Led the development of in-code accessibility libraries for 8 NPM packages, including a core accessibility remediation library, web framework-specific packages for Vanilla JS, React, Angular, and Vue, and a micro-frontend-based static accessibility analysis toolbar using web components and Shadow DOM.
- Managed and automated versioning and publishing of NPM packages using TurboRepo and Lerna, reducing package deployment time by 75%, as well as developed JWT-based read/write access middleware for a private NPM registry using Verdaccio.
- Modernized development and build tooling, and parallelized processes across codebases, reducing development environment startup times by 95%, build times by 80%, and engineering onboarding time by 90% using TurboRepo, PNPM, Vite, Rollup, and ESBuild.
- Interfaced with U.S. customers to translate requests into actionable features, assist with product integration, and manually QA websites, mobile apps, and kiosks to ensure accessibility compliance, resulting in retention of client contracts worth over $1M.

Skills

Languages: HTML, CSS, TypeScript, JavaScript, Shell	**Development & Testing Tools** Git, NPM, Yarn, PNPM, Vitest, Webpack, Rollup, Vite, Lerna, Turborepo, Github Actions
Front End Technologies & Tools: Figma, React, React Native, Expo, Next.js, Redux, RxJS (Observables), Signals, Storybook	**Back End & Infrastructure Technologies:** Node.js, Drizzle, PostgreSQL, Docker, Kubernetes, Cloudflare, AWS

Education

The University of Virginia: School of Engineering and Applied Science (SEAS)   August 2016

- B.S. Computer Engineering & B.S. Electrical Engineering, Double Major