XIAOYU A. GAO

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

PROFILE

Staff Software Engineer with 9+ years of experience and a passion for solving complex technical problems, delivering exceptional products, and leading high-performing engineering teams. Proven track record in fast-paced, high-growth startup environments delivering performant, scalable, and secure software solutions in digital asset management, Web3, and accessibility. Excels at bridging the gap between technical, product, and business stakeholders to achieve strategic goals through first-principles thinking, thoughtful design, and empathetic leadership.

WORK EXPERIENCE

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

- Lead development of an institutional-grade digital asset management platform, evolving internal ops tooling into an external product; build UI design system & component library in React, Tailwind & Storybook, and deliver Avalanche/EVM/Bitcoin transactions support, BIP44-based MPC multi-wallet management, and Auth0-backed multi-tenant features.
- Spearhead AI-assisted development workflows, creating comprehensive documentation, guardrails, and automated code review processes, while mentoring team members on effective AI tool integration.
- 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 & Head of Engineering,* Remote　　　　　　　　　　　　　　　September 2021 - February 2023

- Led the engineering team 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-up with non-custodial wallet creation, resulting in 83% of users signing up with social accounts, and NFT minting with credit cards, leading to 91% of users purchasing NFTs with credit cards.

User1st - *Senior Full Stack Developer / Solutions Architect - R&D,* Remote　　　　January 2020 - February 2023

- Architected & led the development of in-code accessibility libraries for 8 NPM packages, including the core accessibility remediation library, packages for front end framworkes such as React, Angular & Vue as well as Vanilla JS, and a web-component based static accessibility analysis toolbar.
- Managed and automated versioning and publishing of NPM package, reducing package deployment time by 75%, as well as developed a JWT-based authentication & authorization middleware for the platform's private NPM registry.
- Modernized development & build tooling and parallelized tasks, reducing development environment startup times by 95%, build times by 80%, and engineering onboarding time by 90%.
- Liaised with U.S. customers to translate product requests into features, assisted with platform integrations, and manually QA websites, mobile apps, & kiosks to ensure accessibility compliance, resulting in retention of client contracts worth over $1M with companies such as Amtrak & T-Mobile.

SKILLS

Languages:
HTML, CSS, TypeScript, JavaScript, Shell

Development Tools
PNPM, Git, GitHub, Vitest, Vite, Turborepo, Cursor, Claude, GitHub Copilot, Codex

Front End Tools & Technologies:
Figma, React, Tailwind CSS, Tanstack Router, Tanstack Query, Tanstack Form, Tanstack Table, Storybook

Back End Technologies:
Hono, Node.js, Bun, Drizzle, Kysely, PostgreSQL, Auth0

CI/CD & Infrastructure:
Docker, Kubernetes, Helm, Github Actions, Cloudflare, AWS, Azure

Blockchain Technologies:
Wagmi, Ethers, Viem, WalletConnect, Bitcoin, EVM, Avalanche

EDUCATION

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

- B.S. Computer Engineering & B.S. Electrical Engineering (Double Major), Rodman Scholar (Top 5% of Engineering School)