XIAOYU A. GAO

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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 the Experience Platform (XP) engineering team for an institutional-grade digital asset management platform, providing secure custody and transaction support across multiple blockchains including Avalanche, EVM, and Bitcoin.
- Bootstraped internal tooling and evolved it into an external-facing product, implementing a full UI redesign, building a React/Tailwind/Storybook design system and component library, and integrating BIP44-based MPC multi-wallet management and Auth0-backed authentication, governance, and multi-tenant support.
- Spearheaded AI-assisted development workflows, creating comprehensive documentation, guardrails, and automated code review processes, while mentoring team members on effective AI tool integration.
- Collaborate with the finance team to optimize digital asset operations, achieving 98% utilization of stakeable assets, generating $50M+ in tax savings, and increasing transaction generation velocity by 2000% through internal tool development.

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:	**Development Tools**
HTML, CSS, TypeScript, JavaScript, Shell	*PNPM, Git, GitHub, Vitest, Vite, Turborepo, Cursor, Claude, GitHub Copilot, Codex*
Front End Tools & Technologies:	**Back End Technologies:**
Figma, React, Tailwind CSS, Tanstack Router, Tanstack Query, Tanstack Form, Tanstack Table, Storybook	*Hono, Node.js, Bun, Drizzle, Kysely, PostgreSQL, Auth0*
CI/CD & Infrastructure:	**Blockchain Technologies:**
Docker, Kubernetes, Helm, Github Actions, Cloudflare, AWS, Azure	*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)