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# AKI GAO

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Washington, D.C. Metropolitan Area | [github.com/iknowhtml](https://github.com/iknowhtml) | [linkedin.com/in/iknowhtml](https://linkedin.com/in/iknowhtml)

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## PROFILE

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Staff Software Engineer with 10+ years of experience building high-reliability products across Web3/DeFi, accessibility, and institutional digital asset custody. My recent work focuses on translating complex systems — blockchain infrastructure, governance and permissions models, and financial and operational constraints — into intuitive products that enable organizations to securely manage and operate digital assets. systems technical direction in ambiguous product and system spaces while helping teams move faster by reducing development friction, improving engineering standards, and integrating AI-assisted tools and workflows that strengthen developer velocity and system reliability. Mentor engineers by setting clear expectations and modeling strong technical judgment and execution so teams operate autonomously and consistently ship reliable systems.

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## WORK EXPERIENCE

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Ava Labs - *Staff Software Engineer / Team Tech Lead, Remote* February 2023 - December 2025

- Spearheaded the evolution of internal financial tooling into an institutional digital asset custody and management platform, delivering multi-chain transaction support, authentication/authorization/governance systems, MPC wallet infrastructure integration, and a full UI rebrand.
- Re-architected the web application from CSR to SSR, introducing a BFF architecture and external APIs deployed on Kubernetes to improve feature development velocity, enhance developer experience, and enable cloud-agnostic deployments.
- Led the Experience Platform engineering team and set technical direction for the institutional digital asset custody platform, mentoring engineers while partnering with leadership on product strategy and hiring.
- Partnered with the finance team to optimize internal digital asset operations using internal tooling, achieving 98% utilization of stakeable assets, enabling \$50M+ in tax savings, and increasing transaction throughput 20x.
- Spearheaded AI-assisted development initiatives, building codebase documentation, automated review pipelines, and engineering guardrails that enabled ~40% of committed code to be generated with AI while maintaining quality standards.

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

- Co-founded and built a digital asset marketplace and referral platform for musicians on Avalanche C-Chain, raising \$500K in seed funding from Avalaunch, Status, and Wave Financial.
- Led engineering from concept to launch, architecting a low-friction onboarding and minting experience including non-custodial wallet onboarding (83% adoption) and credit-card NFT minting (91% usage), significantly improving user conversion and platform accessibility.

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

- Architected and implemented 8 accessibility-focused NPM packages and modernized build tooling, reducing deployment time by 75%, build times by 80%, startup time by 95%, and onboarding time by 90%.
- Partnered with enterprise customers including Amtrak and T-Mobile, leading platform integrations and accessibility compliance initiatives that helped retain \$1M+ in contracts.

Independent Web3 & Blockchain Consulting - *Principal, Hybrid* November 2017 - September 2020

- Led the redesign of Dexible's decentralized exchange, delivering a new design system, component library, and full UX/UI overhaul of the dApp.
- Provided blockchain consulting for Alluminate and CryptoPets, implementing wallet integrations, blockchain infrastructure, and conducting smart contract audits and technical due diligence.

Booz Allen Hamilton - *Technologist, Washington D.C. Metro Area* May 2017 - November 2017

- Developed proof-of-concept blockchain applications for U.S. government organizations, including financial transaction systems for the U.S. Treasury and secure medical record workflows for the FDA.

Capital One - *Senior Associate Software Engineer, San Francisco Bay Area* August 2016 - November 2016

- Contributed to the Capital One Android banking application, implementing features supporting home and auto loan services.
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## SKILLS

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### Languages:

TypeScript, JavaScript, HTML, CSS, Shell

### Back End:

Node.js, Bun, Hono, PostgreSQL, Drizzle, Kysely

### Blockchain:

Ethers, Viem, WalletConnect, AvalancheJS, bitcoinjs-lib

### Front End:

Figma, React, Tailwind CSS, Tanstack Suite, Storybook

### Infrastructure:

Docker, Kubernetes, Helm, Cloudflare, AWS, Azure, Vercel

### Developer Tooling & AI:

PNPM, Git, GitHub, Vitest, Vite, Cursor, Claude, Copilot

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## EDUCATION

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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)