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# AKI GAO

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[iknowht.ml](https://iknowht.ml) | [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 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 Web3, accessibility & digital asset custody with a focus on full-stack web application & NPM package development.

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## Work Experience

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Ava Labs - *Staff Software Engineer*, Remote

February 2023 - Current

- Lead the engineering effort for a Multi-Party Computation (MPC) based institutional custody/wallet application to manage assets across Avalanche X/P chains & Ethereum Virtual Machine (EVM) chains, and collaborate cross-functionally with senior leadership, design, & security teams to drive product, engineering hiring & technology/systems architecture decisions.
- Work with the internal finance team to manage digital assets, resulting in 98% utilization of stakeable assets for revenue generation & over \$50M in tax savings, as well as develop & maintain internal tooling to empower the finance team to operate efficiently, leading to a 2000% increase in transaction generation velocity.

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

September 2021 - February 2023

- Led the engineering team across the stack from front end, back end, & 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 specifications & engineering tasks, managed 3rd-party design services for UI/UX, and coordinated project schedules, assigned tasks, & tracked progress for the engineering team to meet deliverable timelines.
- Architected & implemented 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, and NFT minting with credit cards via Stripe that resulted in 91% of users purchasing NFTs with credit cards.

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

January 2020 - February 2023

- Led in-code accessibility library development for 8 NPM packages including, but not limited to, the 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.
- 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.

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## Skills

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Languages:

HTML, CSS, TypeScript, JavaScript, Go, Shell

Development & Testing Tools

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

Front End Technologies & Tools:

Figma, React, Redux, RxJS, Storybook, Next.js

Back End & Infrastructure Technologies:

Node.js, Docker, Kubernetes, PostgreSQL, Cloudflare, AWS

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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