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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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Senior 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 includes full stack web application & NPM package development in TypeScript, with a focus on front end & Web3.

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## Work Experience

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Coral - *Technical Co-Founder*, Remote

September 2021 - Present

- Lead engineering team across the stack from front end, back end and smart contract development for NFT marketplace for content-gating, event ticketing & merchandise and crypto-based affiliate/referral marketing platform on Avalanche blockchain that received \$500K of seed investment from Avalaunch, Status & Wave Financial.
- Manage design process and implement fully-typed CSS variable-based design tokens & CSS-in-JS-based design system in React that reduced front end application design & development time.
- Architect and develop event-driven serverless back end for 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 & NFT minting with credit cards via Stripe that resulted in 91% of users purchasing NFTs with credit card.

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

February 2022 - Present

- Lead in-code accessibility library development for 8 NPM packages and implement core features such as asynchronous client-side runtime authentication, server-side rendering support, and additional framework support for vanilla JS & Vue.
- Manage and automate versioning & publishing of NPM packages to reduce package deployments by 75%, and develop JWT token-based read/write access middleware for private Verdaccio registry.
- Modernize 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%.

User1st - *Full Stack Developer - R&D*, Remote

February 2021 - February 2022

- Architected and implemented libraries for flagship in-code accessibility products, including framework-specific packages for React & Angular and static accessibility analysis toolbar package using web components & shadow DOM as a micro-front end application in React.
- Contributed features for core accessibility remediation library including automated fixers for components, unit & integration tests, and decorator library for cross-cutting concerns such as error handling & dependency injection, as well as managed build configurations. for browser script & module compilation and CSS extraction.

User1st - *Solutions Integrator*, Washington, D.C./Remote

January 2020 - February 2021

- Audited client websites and mobile applications and remediated websites to comply with accessibility standards for 20+ clients for compliance with the WCAG 2.1 AA standard, Section 508 guidelines and the ADA.
- Implemented command-line tool to automate website URL discovery and auto-generate web page screenshots for websites that reduced time estimations by 33% and improved accuracy by 50%.
- Developed cross-browser extension to inject in-house runtime environment into client sites during accessibility remediation to replace unreliable existing tooling in 90% of use cases.

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## Skills

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### Languages:

TypeScript, JavaScript, Solidity, Go, Shell

### Development & Testing Tools:

Git, NPM, Yarn, PNPM, Mocha, Chai, Webpack, Rollup, ESBUILD, Vite, Lerna, Turborepo

### Front End Technologies & Tools:

Figma, HTML, CSS, React, Emotion/Styled Components, Redux, Zustand, RxJS, Storybook, Next.js, Wails

### Back End & Infrastructure Technologies:

Node.js, Express, Docker, Firebase, Vercel, Cloudflare, AWS, Google Cloud Platform

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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