
AKI GAO

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Profile

I am a solutions architect, software engineer, & engineering leader with a passion for designing & creating products that empower people & democratize technology and building & leading world class engineering teams. I believe in the power of leveraging compassionate design & thinking based on first-principles to drive product, engineering, & leadership. I offer 5 years of experience in the software engineering industry, and my areas of expertise include full stack engineering/architecture, UX/UI/accessibility & engineering leadership/management.

Work Experience

User1st - *Solutions Architect - R&DRemote* February 2022 - Present

- Migrate development & build tooling for all React front end codebases to Vite, and reduce development environment start up time by 95% and build time by 40% on average.
- Architect, develop proof-of-concept, and lead developers to implement DOM event-driven and observable stream-based component identification system for flagship digital experience platform.
- Spearhead engineering initiatives such as front end/TypeScript code style guidelines/conventions, documentation for codebases, and technical workshops.

User1st - *Software Engineer - R&D, Remote* February 2021 - February 2022

- Architected and implemented features/infrastructure for flagship digital experience, including front end library packages for automatic accessibility remediation, micro-frontend for cross platform Toolbar web component package, monorepo structure/build tooling for codebase, and payment gated NPM packages/registry using token-based authentication.
- Performed large scale refactor to remove legacy code for flagship accessibility platform codebase for front end (React/vanilla JS), back end (.NET) & infrastructure (Docker, Kubernetes & shell scripts) that reduced codebase size by 75%.
- Contributed core features and managed codebase infrastructure for automated accessibility remediation library including automated accessibility fixers & test cases, decorator library for cross-cutting concerns, and build configurations for compilation for browser script & module library, as well as 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, including a major wireless network operator & Fortune 500 healthcare provider, for compliance with the WCAG 2.1 AA standard, Section 508 guidelines, & the ADA.
- Created internal tooling to automate tasks & improve productivity including:
 - Command-line tool to automate website URL discovery and auto-generate web page screenshots to reduce time estimations by 33% and improve accuracy by 50% for client websites.
 - Cross-browser extension to inject in-house runtime environment for client sites during accessibility remediation to replace unreliable tooling.

Skills

Languages:

Shell, JavaScript, TypeScript, Solidity

Front End Technologies & Tools:

Figma, HTML, CSS, React, Emotion, Angular, Redux, Zustand, RxJS, Storybook, Next.js

Development & Testing Tools:

Git, NPM, Yarn, Webpack, Rollup, Lerna, ESLint

Back End & Infrastructure Technologies:

Node.js, Express, Docker, Vercel, Firebase, GCP, AWS

Education

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

August 2016

- B.S. Computer Engineering & B.S. Electrical Engineering