AKI GAO

(703) 901-0568 | xiaoyu.akihiro.gao@gmail.com | iknowht.ml | github.com/iknowhtml | linkedin.com/in/iknowhtml

Profile

I am a software engineer, architect & leader with a passion for 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 over 4 years of professional experience in software development in Agile environment, and my areas of expertise include front end engineering/architecture, UX/UI & digital accessibility.

Work Experience

User1st - *Software Architect - R&D,* Remote   February 2022 - Present

- Architect, develop proof-of-concept, and lead team of engineers to implement front end event-driven observable stream-based component identification system for flagship digital experience platform.
- Conduct code reviews advise/mentor developers & teach workshops on front end/TypeScript architecture, design patterns & general best practices.
- Spearhead engineering initiatives including front end/TypeScript code style guidlines/conventions, documentation for codebases, and ceremonies such as retrospectives & post-mortems.

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:	Development and Testing Tools:
Shell, JavaScript, TypeScript	Git, NPM, Yarn, Webpack, Rollup, Lerna, Babel, Mocha, Chai, Puppeteer, ESLint
Front End Technologies:	Back End & Infrastructure Technologies:
Figma, HTML, CSS, React, Redux, Emotion/Styled Component, Angular, RxJS, Emotion, Storybook, Next.js	Node.js, Express, Docker, Vercel, Firebase (Firestore, Cloud functions), GCP, AWS

Education

The University of Virginia: School of Engineering and Applied Science (SEAS)   August 2016

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