
AKI GAO

(703) 901-0568 | aki.gao@user1st.com | iknowht.ml | github.com/iknowhtml

Profile

I am a Software Engineer with a passion for creating products that empower people and democratize technology. I believe in the power of leveraging compassionate and data-informed design based on first-principles to drive product and engineering practices. I offer over 3 years of professional experience in software development using functional programming/object-oriented paradigms and event-driven architectures in Agile environments. My expertise is in front-end, UX/UI, and digital accessibility, and my areas of professional interest include the Web, software architecture, and engineering productivity/leadership.

Work Experience

User1st - *Software Engineer - R&D*, Remote

February 2021 - Present

- Architect and implement custom dependency injection framework and decorator libraries, bootstrapped and manage testing, linting and Webpack configurations, and develop automated accessibility fixes for a greenfield AI-driven accessibility remediation SaaS platform developed in TypeScript.
- Resolve critical customer UI issues for an automated web accessibility testing SaaS platform developed with React that led to the retention of a multi-million dollar enterprise client.
- Perform manual accessibility testing for mobile, desktop and kiosk applications, advise customers on resolving accessibility issues, and provide technical support for enterprise clients, as well as internal sales and operations teams.
- Coordinate directly with enterprise stakeholders to analyze business requirements and communicate customer feature requests/issues to product owner.
- Lead instruction for accessibility training with 20+ hours of content covering a range of topics including accessibility standards & principles, assistive technologies and best practices for developing and testing accessible software.

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

January 2020 - February 2021

- Remediated websites to comply with accessibility standards for 20+ clients, including a major wireless network operator and a Fortune 500 healthcare provider.
- Audited client websites and mobile applications for compliance with the WCAG 2.1 AA standard, Section 508 guidelines, and the American's with Disabilities Act (ADA) with assistive technologies such as JAWS, NVDA, VoiceOver and Talkback.
- Created internal tooling to automate tasks & improve productivity including:
 - A 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.
 - A cross-browser extension to inject User1st's uRemediate runtime environment for client sites during accessibility remediation to replace unreliable tooling in 95% of use cases.

Skills

Languages:

JavaScript, TypeScript, Shell (Bash)

UX/UI & Front End Technologies:

Balsamiq, Figma, Sketch, HTML, WAI-ARIA, CSS, Storybook, React, Redux, Emotion, Slack Block Kit

Development and Testing Tools:

Git, NPM, Yarn, Webpack, Babel, Jest, Mocha, Chai, Puppeteer, ESLint

Back End & Infrastructure Technologies:

Node.js, Express, PostgreSQL, Docker, Kubernetes, AWS, Slack Admin API/Bolt SDK,

Education

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

August 2016

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