

JACOB ALSPAWE

Staff Frontend Engineer

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PROFILE

Staff Frontend Engineer and UI Lead building and scaling complex, multi-application platforms. Sets frontend architecture and technical direction across Vue, React, TypeScript, and GraphQL applications, delivering up to 80% performance improvements and major reductions in technical debt. Led large-scale frontend modernizations (Vue 2 to Vue 3, 650+ components) and built shared design systems that improved accessibility, consistency, and delivery speed. Motivated by raising engineering standards through mentorship, clear patterns, and hands-on technical leadership.

EMPLOYMENT HISTORY

❖ **Staff Frontend Developer & Satellite Operator, Loft Orbital** Jan 2022 — Present
Denver, CO

- Defined frontend architecture and technical direction across multiple Vue applications, aligning shared UI systems with product strategy and execution
- Led a Vue 2 to Vue 3 migration across 650+ components, modernizing TypeScript usage, build tooling, and architectural patterns to reduce technical debt
- Redesigned the client-side data request architecture (GraphQL/Apollo) to reduce network overhead and improve caching, resulting in up to 80% faster page loads and fewer runtime bottlenecks
- Established a shared design system and web-component library used across multiple applications, improving accessibility, visual consistency, and development speed
- Mentored engineers through architectural guidance, code reviews, and pair programming, raising code quality and team velocity
- Introduced standardized frontend engineering workflows and quality gates (linting, formatting, PR templates), increasing team throughput and delivery predictability
- Partnered with operations teams to support satellite fleet health management, assisting with system assessments and anomaly response to maintain mission continuity

❖ **Frontend Lead & Full-Stack Software Engineer, IBM UrbanCode** May 2019 — Jan 2022
Cleveland, OH

- Led the frontend team for two enterprise DevOps products built with React and GraphQL, owning UI roadmap execution, code quality, and release readiness
- Improved frontend performance by up to 15x by identifying and eliminating critical rendering bottlenecks
- Reduced the UI defect backlog by over 90% within 10 months, increasing product stability and client confidence
- Established release validation standards to ensure UI functionality aligned with business requirements prior to delivery
- Acted as a technical advocate for high-profile enterprise accounts, partnering with global teams to meet strict SLAs and protect multimillion-dollar client investments
- Earned Distinguished performance accreditation multiple times for sustained technical leadership

❖ **Full-Stack Software Engineer, Pointe Blank Solutions** May 2016 — May 2019
Westlake, OH

- Contributed to an enterprise suite of web applications streamlining the justice process, integrating agencies across 50+ Ohio counties
- Built and delivered full-stack features using React, TypeScript, C#, .NET, and SQL Server, implementing CI/CD pipelines, automated tests, and robust client- and server-side functionality
- Optimized database queries and API endpoints, improving system performance and scalability

- ❖ **Company Founder & Lead Engineer, CWRUd** Aug 2018 — May 2019
Cleveland, OH
- Founded and led development of a data-driven web service (Node.js, MongoDB, React) and iOS app (Swift) surfacing real-time campus “busyness” metrics
 - Aggregated unique active wireless clients across campus access points using ARP and Cisco Prime Infrastructure APIs to power real-time analytics
 - Devised algorithms to forecast crowd levels at campus points of interest, enabling predictive insights for users
 - Planned and led meetings with deans, network admins, and IT marketing teams to drive product adoption and campus engagement
- ❖ **Project Manager & Lead Developer, Synchrony** Aug 2018 — May 2019
Cleveland, OH
- Led development of a synchronized streaming service using Django, Python, TypeScript, and Angular, enabling real-time shared playlist collaboration and discovery via the Spotify API
 - Designed and implemented a responsive, mobile-first interface with real-time updates and seamless playback, enhancing user engagement and collaboration
 - Awarded departmental honors for the most outstanding capstone project in Electrical Engineering and Computer Science
- ❖ **Teaching Assistant & Peer Tutor, Case Western Reserve University** Aug 2016 — May 2019
Cleveland, OH
- Led recitations and tutoring workshops for computer science and electrical engineering courses, improving student comprehension and outcomes
 - Customized instruction to accommodate diverse learning styles and skill levels
 - Collaborated with faculty to align lesson plans with course objectives and student needs
 - Managed grading and records for assignments, quizzes, and exams, ensuring accuracy and timely feedback

EDUCATION

- ❖ **Case Western Reserve University** Aug 2014 — May 2019
B.S. in Computer Science Cleveland, OH
- Major GPA: 3.63/4.00
 - Honors: Recognized for the department's most outstanding EECS capstone project (2019)
 - Relevant coursework: Data Structures & Algorithms, Operating Systems, Systems Programming, Databases, Computer Networks & Security, Software Engineering, Mobile App Development, Programming Languages, Project Management

SKILLS

Javascript/TypeScript	<i>Expert</i>	Jira	<i>Experienced</i>
HTML/CSS	<i>Expert</i>	Figma	<i>Experienced</i>
Vue	<i>Expert</i>	Responsive Design	<i>Expert</i>
React	<i>Experienced</i>	UI/UX	<i>Experienced</i>
Apollo GraphQL	<i>Expert</i>	Web Performance Optimization	<i>Expert</i>
Vite/Webpack	<i>Expert</i>	Accessibility	<i>Skillful</i>
Vitest/Jest	<i>Experienced</i>	Java	<i>Experienced</i>
Git	<i>Expert</i>	Swift	<i>Skillful</i>

HOBBIES

Swimming, running, strength training, hiking, rock climbing, skiing, traveling, board games, card games, video games, puzzles