

Jeff Rifwald

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Experience

Aspira, Principal Software Engineer *Dallas, TX* (January 2025 - Current)

- Led and executed projects for 3 cross-functional product teams.
- Worked with design to develop design systems and foundations for teams of 10+ engineers.
- Led accessibility and testing initiatives to comply with multiple federal and state laws.

Hewlett Packard Enterprise, Principal Software Engineer *Spring, TX* (April 2023 - November 2024)

- Led frontend teams of up to 10 engineers to launch and maintain 4 separate AI/ML applications.
- Built performance testing software and optimized frontend speed by 20% for AI/ML pipeline software.
- Collaborated closely with product, design, and other stakeholders to execute 40+ AI/ML features.
- Mentored engineers across 3 cross-functional groups allowing for optimal team growth.

Jeeves (YC S20), Principal Software Engineer *New York, NY* (February 2022 - April 2023)

- Coordinated 3 teams in Asia, Europe, and the Americas to build production financial applications.
- Initiated 2 global finance products for emerging markets in the Americas and Europe.
- Created foundations for code quality, testing, architecture, and CI/CD guiding over 20 engineers.

Pachyderm (YC W15), Principal Software Engineer *San Francisco, CA* (May 2020 - February 2022)

- Guided and mentored a team of 5 engineers across 3 teams to build AI/ML applications.
- Increased the size of the frontend team from 1 to 5 engineers in less than 6 months.
- Established the frontend architecture for 3 enterprise and open source applications.

Moda Operandi, Principal Software Engineer *New York, NY* (November 2019 - May 2020)

- Led an initiative to increase frontend app performance by 25% from worst to best in category.
- Established a foundation for testing and increased code quality coverage by 80%.
- Collaborated on a design system with over 50 components targeting reusability and accessibility.
- Introduced web app architecture for balancing SEO and performance while rebuilding the frontend.

Walmart Labs, Principal Software Engineer *Sunnyvale, CA* (July 2017 - November 2019)

- Architected and migrated 5 large-scale React apps to Walmart's open source Electrode platform.
- Executed mission-critical projects used by over 1 million customers a day.
- Implemented a Progressive Web App to increase Grocery's frontend performance by over 20%.
- Shaped unit, functional, and integration testing best practices for a team of 50+ frontend engineers.
- Led a large initiative to increase Walmart Grocery accessibility by 75% utilizing ADA guidelines.
- Applied for and granted 3 U.S. patents related to Walmart Grocery frontend performance.

Formidable Labs, Senior Software Engineer *Seattle, WA* (June 2016 - July 2017)

- Contributor to 8 and creator of 2 open source JavaScript libraries.
- Researched and implemented techniques for clients using emerging frontend technologies.
- Optimized frontend infrastructure for large-scale clients reaching over 10 million customers per day.

Ambition (YC W14), Software Engineer *Chattanooga, TN* (February 2013 - March 2016)

- Built 3 interactive and engaging web applications using Python, Django, JavaScript, and React.
- Incorporated static analysis and testing on the frontend to increase application stability.
- Led a large-scale frontend framework migration and redesign from ExtJS to React.

MTSU, Developer/Researcher *Murfreesboro, TN* (June 2011 - December 2012)

- Developed a 3D virtual world in Unity used by the Vanderbilt Kennedy Center for autism research.
- Studied and replicated face and speech movement using Autodesk's Maya modeling software.
- Administered over 20 workstations and technology for the MTSU Center for Historic Preservation.

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Patents/Publications

U.S. Patents

- Systems and methods for pre-rendering HTML code - U.S. Patent 11,341,315 - May 2022
- Pre-loading and caching application code - U.S. Patent 10,785,336 - September 2020
- Caching core JavaScript bundles - U.S. Patent 10,764,390 - September 2020

WorldComp July 2013, CGVR

- A Pipeline From COLLADA to WebGL for Skeletal Animation

Education

Middle Tennessee State University *Murfreesboro, TN*

- Master of Science in Computer Science - December 2012
- Bachelor of Science in Recording Industry - May 2010

Skills

Programming Languages: JavaScript, Typescript, ECMAScript, Python, HTML, HTML5, CSS, CSS3, Go, Golang, C, PHP, C++, D, C#, Ruby

Libraries & Frameworks: React, React Native, Express, GraphQL, Node, NPM, Apollo, gRPC, Redux, Webpack, Vite, Babel, Jest, Vitest, Enzyme, Bootstrap, Electron, PWA, ESLint, PostCSS, Sass, Less, Stylus, Styled-Components, Django, PostgreSQL, MySQL, MongoDB, jQuery, React Testing Library, Cypress, Playwright, WebGL, WebGPU, PyTorch, Tensorflow, NextJS, Next.js, Helm, Terraform, Storybook, Tailwind, Zod, Radix, ShadCN, Tanstack

Other Software & APIs: Linux, macOS, Mac OS X, Windows, Bash, Git, AWS, GCP, Photoshop, Figma, Wordpress, a11y, Docker, Kubernetes, k8s, Jupyter, Grafana, Machine Learning, Artificial Intelligence, AI, ML, LLM, Large Language Model, OpenAI, HuggingFace, CI/CD, Lighthouse, WebPageTest