

Joshua Ferrell

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Profile

Staff software engineer with 10+ years of experience and expertise in React.js, TypeScript, and CSS. Proven technical leader in design systems, committed to promoting best practices and guiding teams towards impactful work. Passionate about visual design craft, mentorship, and fostering collaboration across cross-functional teams.

Skills

Design System Skills: Progressive Web Applications (PWAs), User Interface Design, Mobile Web Design, Accessibility, Design Systems, Atomic Design, Design Tokens

Technical Skills: Node.js, HTML, CSS (Saas, Less), CSS-in-JS, JavaScript, TypeScript, React.js, Redux, Jest, Git, CI Pipeline, GraphQL, Amazon Web Services, REST APIs, Playwright, React Testing Library, Webpack, Rollup, ESBuild

Experience

Senior Software Engineer II

Confluent

Nov 2021 - Feb 2023

As part of UI Foundations team, created standards and best practices for front-end engineers on event streaming platform. Led design system development and component maintenance.

- Built new design system using TypeScript and React.js, enhancing type-safety for design tokens and IntelliSense for component best practices.
- Developed CMS-to-Storybook integration, onboarding 10 designers for direct design system documentation.
- Spearheaded Playwright E2E testing, migrating teams from Datadog Synthetics and enabled large-scale data mocking.
- Eliminated 800+ accessibility issues; implemented training and regression tests to maintain compliance.
- Reduced CI pipeline build time by 20 minutes using test parallelization.

Staff Software Engineer

GoodLeap

Aug 2019 - Oct 2021

Early-hire engineer instrumental in transforming green energy lending business into versatile lending platform, enabling rapid expansion into new markets and customizable loan offerings. Boosted company valuation by \$11 billion, while leading and mentoring full-stack development teams.

- Built component library used by 20+ developers leveraging React, TypeScript, and Styled Components.
- Cut total number of lines of code by 75% by migrating 3 legacy applications to a single Next.js application.
- Accelerated time to add new lending products from 4 months to 2 days by creating configuration-based platform.
- Implemented unified API for business logic, allowing loan status management across web and mobile apps.
- Developed email service with Storybook integration, enabling legal and security teams to effortlessly edit and preview automated customer emails.

Senior Software Engineer

Workgroups DaVinci

Aug 2018 - July 2019

Technical lead for design collaboration tool built in React.js and TypeScript that rendered images, pdfs, video, and 3D models and provided annotation tools so customers could provide feedback on their designs. Tool allowed for versioning and file comparison using highlighting of file changes.

- Created design collaboration tool in one month to release before major conference.
- Collaborated with Adobe engineers to create first TypeScript plugin for Adobe XD.
- Modified design collaboration tool for white-labeling by creating JSON file for brand settings and changing UI look.
- Developed file conversion tool in 1 month supporting over 450 file types, used AWS SQS and Node.js consumer to transform video formats, optimize images with image pyramiding for deep zoom, and convert word files to PDF.

Software Engineering Consultant

JFerrell Consulting

Dec 2017 - Aug 2018

Learn Health: Dermatological skincare education platform

- Developed React.js component library for medical education platform, promoting reuse, simplifying complexity, and reducing development time by 50%.
- Led development of dermatological skin type tool using GraphQL, Node.js, and React to provide tailored skincare routines and product recommendations.

VoiceTeach: Voice interface accessibility company

- Improved user engagement by building online demo allowing voice interaction through website. Used RxJS, React, IBM Watson, and web speech recognition.

Senior Software Engineer

Western Health Advantage

Sept 2016 - Dec 2017

Led technical transformation at health insurance company by introducing microservice architecture and React.js development to 20 engineers and trained staff on Agile and SCRUM best practices by facilitating SCRUM rituals.

- Designed and developed component library in React.js allowing developers to use prebuilt accessible and reusable components.
- Built billing management for mobile application using React Native.
- Designed and implemented new billing architecture and authorization services using microservices and Node.js.
- Developed documentation portal for developers to view Swagger REST APIs and database information.

Software Engineer (Intern)

Tennessee Valley Authority

Jan 2015 - July 2016

Collaborated with archeologists and river maintenance teams offering technical support and developing new ArcGIS applications.

- Created web application used by 20+ employees allowing maintenance of Native American cultural artifacts.
- Automated database migration with ArcMap extension transitioning from Oracle to Microsoft SQL Server.
- Modernized legacy Perl web app to ASP.NET MVC, enabling dam and river monitoring near nuclear power plants.

Software Engineer (Intern)

FedEx TechConnect

June 2015 - Aug 2015

- Developed inventory tracking web application that scans barcodes to check in and check out computers and equipment using .NET MVC, JavaScript, and Microsoft SQL Server
- Developed and launched project management tool with over 200 users used throughout FedEx TechConnect.

IT Business Analyst (Intern)

FedEx

June 2014 - Aug 2014

- As Scrum master, facilitated discussion among customers and product owners. Designed and developed front-end visualization dashboard that shows graphs of shipment information across all operational companies in 2 months.
- Created dashboard used for weekly executive presentations and automated previously manual process to generate dashboard, reducing time from 8 hours to instantaneous.

Awards

Innovator of the Year, GoodLeap, 2020

Customer Focus Award, FedEx, 2014

Winning at Work, Tennessee Valley Authority, 2016

Director's Choice Award, FedEx, 2014

Education

Bachelor of Science in Computer Science

University of Tennessee, Knoxville, 2016