

Darrin Duncan

Front-End Architect • Performance & Reliability Engineer

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SUMMARY

Senior Front-End Architect and Performance Engineer with 15+ years of experience designing, stabilizing, and optimizing revenue-critical web applications. Specializes in performance-first frontend architecture, Core Web Vitals remediation, checkout and funnel stability, and scalable UI systems for high-traffic e-commerce and SaaS platforms.

Known for diagnosing complex frontend failures, reducing production risk, improving delivery reliability, and partnering with product and marketing teams to support measurable business outcomes. Strong advocate for pragmatic, maintainable systems over premature optimization.

CORE STRENGTHS

- Front-End Architecture & System Design
- Performance Engineering & Core Web Vitals
- E-Commerce & Checkout UX Stability
- React & TypeScript at Scale
- CI/CD & Front-End Delivery Pipelines
- Accessibility & UX Risk Reduction
- Production Incident Triage
- Developer Enablement & Standards

TECH STACK

Architecture: Component-driven systems, React Query, Context API, Redux
Performance: Lighthouse, Chrome DevTools, Web Vitals analysis, bundle optimization
Frameworks: React, Node.js
Tooling: Git, GitHub, CI/CD, Grunt
CMS & Commerce: WordPress, WooCommerce
AI-Assisted Development: ChatGPT, Claude, Copilot, Lovable
Languages: JavaScript, TypeScript, HTML5, CSS3, Sass
Design: Figma, Adobe XD, UI systems

PROFESSIONAL EXPERIENCE

Sr. Front-End Performance & Architecture Consultant

Boscov's Department Stores | May 2025 – Oct 2025

- Diagnosed and resolved frontend performance and stability issues in a high-traffic e-commerce environment, addressing JavaScript conflicts, DOM inefficiencies, and rendering bottlenecks.
- Improved checkout and product page reliability by stabilizing client-side execution paths and reducing UI failure modes during peak traffic periods.

- Translated design intent into production-ready frontend implementations, ensuring accessibility compliance, performance stability, and cross-device consistency.
 - Established frontend architecture standards and performance review practices adopted across the engineering team.
 - Automated and refined CI/CD workflows to reduce manual deployment friction, improve release reliability, and lower production defect rates.
 - Served as senior escalation engineer for real-time production incidents, troubleshooting complex frontend issues under high-load conditions.
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Senior Front-End Developer / UI Performance Engineer

Nutrisystem, Inc | Dec 2018 – Feb 2025

- Designed and maintained scalable landing page and funnel systems supporting multiple consumer brands, enabling rapid iteration while preserving performance and UX consistency.
 - Built and supported a customer-facing scheduling application used at scale, focusing on reliability, usability, and long-term maintainability.
 - Modernized legacy frontend codebases by upgrading frameworks, improving accessibility, and reducing mobile and rendering friction.
 - Collaborated closely with UX, marketing, and backend teams to improve checkout flows and payment integrations, reducing failure points and customer drop-off risk.
 - Mentored frontend developers on performance-aware design, debugging strategies, and system-level thinking.
 - Contributed to improved delivery predictability by standardizing frontend patterns, documentation, and development workflows.
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Front-End Developer (E-Commerce Systems)

Gateway Ticketing Systems | Apr 2018 – Dec 2018

- Developed and optimized customer-facing ticketing and purchase flows with a focus on usability, responsiveness, and operational reliability.
 - Improved frontend load behavior and interaction responsiveness through targeted refactoring and asset optimization.
 - Reduced customer support burden by improving UX clarity and eliminating common client-side failure scenarios.
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Web Developer / UX Engineer / Digital Product Developer

Dynalene Inc | May 2017 – Apr 2018

- Led a full redesign of the company's digital presence, aligning UX, content structure, and frontend implementation with business goals.
 - Built internal tools to streamline communication and reduce operational overhead.
 - Implemented UX-driven lead capture improvements that increased inbound sales activity and engagement.
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Earlier Experience (Selected)

Frontend and UX roles across regulated, enterprise, and non-profit environments including Federal Reserve Bank of New York, Blue Cross NEPA, Vanguard, and agency-based teams.

PROJECTS

Landing Page Auditor

Internal audit tool used to surface UX friction, accessibility gaps, SEO fundamentals, and performance risk patterns impacting conversion and stability.

Agile Planning Poker App

Real-time collaborative estimation tool focused on reliability, latency, and developer experience.

EDUCATION & CONTINUING FOCUS

- Frontend Performance & Accessibility
- AI-Assisted Development & Engineering Workflows