Grant Forrest

Senior Full-Stack Web Engineer | Raleigh, NC | Remote

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Creative and pragmatic builder with 11 years of modern web experience. I own ideas from product design to pixels as a technical leader. Moving quickly *and* carefully, I hone in on the most important problems and deliver solutions that are scalable, extensible, and delightful.

Career

Volumetrics | Senior Platform Engineer | 2024 - 2025 | Remote

- Led engineering at this seed-stage startup to rapidly prototype, launch, and measure products in search of market fit in XR (Extended Reality).
- Owned and architected a full cloud-native stack built on React, Cloudflare edge workers, and AI agents.
- Tackled complex systems: in-browser IDEs, real-time collaboration, seamless device pairing, AI code generation; I built whatever we needed to rapidly launch and iterate.
- Delivered a consistent and adaptable design system for 2D and 3D UIs, accelerating our delivery across multiple prototypes.

Butlr | Senior Full-stack Engineer | 2023 - 2024 | Remote

- Unlocked faster and more ambitious on-site hardware installations (from 10s to 100s of devices) by connecting installer feedback with product leaders, prioritizing and delivering key features in internal tooling, and handling on-call requests.
- Owned and completed a migration from DynamoDB to Postgres with no downtime or data loss, improving API capacity by 30% and eliminating data inconsistency bugs.
- Added diagnostic metrics revealing daily spot outages. From this, I identified flaws in metrics recording for the 10k+ device fleet and mitigated them, completely resolving nearly 1 hour of average daily downtime.

Mysteries (d.b.a. Glue) | Senior Full-stack Engineer | 2023 | Remote

- Bootstrapped the design system to launch a major company rebranding.
- Added graph visualizations of key trends to the product dashboard, demonstrating Glue's value to customers and increasing engagement.
- Overhauled the checkout flow, leading product discovery to clarify itemization and reduce billing-related support tickets.
- Reduced cost and time to manage a large library of customer communications by consolidating to SendGrid templates and retiring legacy email systems.
- Spearheaded team training on frontend practices and craft development via code review, pair programming, and regularly publishing internal learning materials.

With Labs | Founding Engineer | 2020 - 2023 | Remote

- Led development of PopSpace, a web-based spatial virtual coworking and meeting app.

- Scaled real-time multimedia to 50+ participants per session, opening new markets for workshops and corporate events.
- Developed a custom HTML & CSS based 2D infinite canvas renderer to power performant, interactive "virtual room" spaces in the browser, responsive across all devices.
- Built real-time websocket data synchronization for user interactions and shared media.
- Integrated audio, video, and screensharing using Twilio and LiveKit WebRTC services, with automatic fallback for zero downtime.

[Bandwidth](#) │ Software Developer IV │ 2014 - 2020 │ Raleigh, NC
- Founded the UI team to deliver a unified technology stack of React and TypeScript for frontend products across the organization, streamlining development and branding efforts.
- Did product discovery work alongside product owners to migrate legacy products to new codebases with no customer disruption.
- Owned the design system in collaboration with the product design team to roll out new interactions and styling across multiple products during a company rebrand.
- Mentored team members to develop skills with modern web technologies and accessibility.

[North Carolina State University Libraries](#) │ Student Developer │ 2012 - 2014 │ Raleigh, NC
- Designed and developed user-facing book checkout kiosk software using WPF and C#.

Notable Open-Source Projects

https://biscuits.club │ A suite of local-first tools
- Showcases my experience with rich user interaction and thoughtful product design.
- Apps feature collaborative experiences, real-time presence, and offline support.

https://verdant.dev │ A local-first framework built on CRDTs
- A unique approach to collaborative data to improve storage use and migrations.
- Provides distributed and resilient data, schema-based document storage, multi-user collaboration, and reactive querying.

Skills

Tools: Typescript, Javascript, HTML, CSS, React, Tailwind, Vite, NextJS, ThreeJS, GraphQL, NodeJS, SQLite, Postgres, Docker, Cloudflare Workers, Durable Objects, GCP, AWS, Kubernetes
Experience: Frontend Development, Full-Stack Development, Design Systems, Technical Leadership, Scalability, Legacy Migration, Product Discovery, Product Design

Education

BS in Computer Science
North Carolina State University │ 2014 │ Raleigh, NC