

# micah rich

Senior Design Engineer • Full-Stack Developer • Product Designer

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Design Engineer who builds complete products from concept to production—designing interfaces, writing React/Next.js/TypeScript, and shipping AI-powered tools. I've rebuilt mission-critical systems serving emergency responders, led technical transformations at agencies working with Google and Disney, and founded businesses from scratch. I thrive in the space between design and engineering: prototyping in Figma, then building production-ready code. Whether working solo or leading teams, I focus on making complex systems intuitive and shipping work that drives real impact.

## PROFESSIONAL EXPERIENCE

### **Head of Internal Tools — Product Designer, Software Engineer, Product Manager** • Citizen • Jan 2017 – Jun 2018

- Built real-time audio/video processing system with keyboard-driven controls using React and WebSockets; achieved 3x throughput during emergency operations.
- Designed and built incident command center with real-time mapping, interactive markers, and dynamic alert radius; reduced duplicate alerts by 15-20%.
- Migrated from Create React App with Redux and Firebase to Next.js with PostgreSQL and real-time WebSocket sync; achieved zero downtime during 24/7 operations.
- Created Time to Incident (TTI) performance metrics tracking emergency response speed; provided executive dashboard for optimization decisions.

### **Lead Curriculum Design, Product Manager, Instructor** • General Assembly • Aug 2014 – Nov 2015

- Redesigned curriculum across 14 international markets with 85+ instructors; unified tech stack around Ruby, Rails, React, JavaScript, Node.js, Express, MongoDB, and PostgreSQL.
- Authored 110K+ word handbook with lesson plans, instructor guides, and assessment rubrics; standardized program delivery while maintaining teaching flexibility.
- Designed historical progression approach where students experience real development pain points before learning modern solutions (e.g., static HTML frustration → framework appreciation).

### **Founder, Designer/Developer, Head of Education** • The League of Moveable Type • Jan 2009 – Present

- Built complete platform using Next.js and TypeScript including e-commerce, content delivery, and community features; scaled to 50K+ subscribers worldwide.
- Developed education platform delivering 12 workshops and 5 courses with video streaming, payment integration, and automated email campaigns reaching global audience.
- Created and shipped 17 open-source font families adopted by Google Fonts, NBCUniversal, Instagram, and political campaigns.

### **Head of Product, Tech Lead, Client Manager** • Wildebeest • Oct 2015 – Dec 2022

- Architected and led technical modernization from WordPress and jQuery to React/Next.js microservices; delivered enterprise projects for Google, Disney, Spotify, and Hulu.
- Built engineering practices including structured mentorship, daily code reviews, CI/CD pipelines, and automated testing; dramatically improved deployment speed and team confidence.
- Led multi-million dollar projects including multi-language corporate sites, machine learning playlist curation, and real-time community platforms.

**Founder, Designer & Developer • A Good Company • Jan 2009 – Aug 2014**

- Designed Mozilla Firefox Marketplace, PRX/NPR, NBCUniversal, and MetaLab projects; consulted for emerging tech companies including Stripe during critical growth phases.
- Built A Good Portfolio platform with drag-and-drop builder and customizable themes serving thousands of users; created award-winning IRS redesign initiative.
- Pioneered 'design in public' methodology; featured in net Magazine and HOW Magazine for transparency and educational approach to client work.

PROJECTS

**jobheist - ATS Analysis CLI • <https://github.com/micahbrich/jobheist>**

Built and published open-source CLI tool for ATS resume analysis; analyzes resume compatibility against job postings using AI-powered pattern matching.

- Published to npm using TypeScript, Vercel AI SDK, and Firecrawl for job scraping and ATS analysis
- Implemented streaming analysis with real-time progress tracking and 0-100 scoring algorithm

**Lettercase - AI Font Management • <https://micah.sh/projects/lettercase>**

Rebuilt font selection platform with AI agents transforming browsing into contextual recommendations; achieved 80-85% classification accuracy using machine learning.

- Built AI agents that understand design context, project requirements, and brand positioning to recommend appropriate typography
- Developed custom machine learning algorithms for font classification based on visual characteristics and contextual use cases

**Mailbag - AI Newsletter Platform • <https://micah.sh/projects/mailbag>**

Rebuilt newsletter tool with AI agents using Next.js 15, Vercel AI SDK 5, GPT-5, react-email, Resend, and Notion API; reduced production time from 4 hours to 5 minutes while maintaining voice and tone.

- Built conversational AI system that writes, edits, and fact-checks newsletter content matching exact voice and style guidelines
- Created orchestrated multi-agent chain with Resend and react-email that fetches URLs, enhances descriptions, assembles newsletters with real-time preview, and delivers to 30,000+ subscribers

SKILLS

**Design & UX:** Product Design, UI/UX Design, Design Systems, Component Libraries, Design-to-Code, Prototyping, Figma, User Research, Information Architecture, Interaction Design, Visual Design, Brand Design, Adobe Creative Suite, 0-to-1 Product Development

**Technical:** React, Next.js, TypeScript, JavaScript, Node.js, HTML/CSS, Tailwind CSS, PostgreSQL, MongoDB, AI/ML, LLMs, Vercel AI SDK, Resend, react-email, System Architecture, Microservices, REST APIs, WebSockets, Performance Optimization, Vercel, Supabase, AWS, CI/CD, Git

**Leadership & Business:** Technical Leadership, Product Management, Team Management, Cross-functional Collaboration, Mentoring, Stakeholder Management, 0-to-1 Products, Startup Experience, Technical Strategy, Code Review, Agile Development, User-Centric Design, Open Source, Curriculum Development

EDUCATION

Otis College of Art + Design • **BFA • Dual Major in Motion Graphics + Graphic Design**