

# Ryan Friedman

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## SUMMARY

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**From customer requirement to production release - I own the full cycle.** I have 20 years spanning every software IC role: developer, project manager, tech lead, architect, product manager and back to development.

I've joined multiple stalled initiatives and delivered each within a year. I've also defined and led products from scratch when I saw gaps nobody was filling.

I lead by unblocking, not dictating, through servant leadership and intent-based guidance. Teams I work with go faster because they're in on the decisions and aligned on the outcomes. This same approach helps me navigate sometimes-conflicting stakeholder requirements and timelines.

A manager once called my breadth a *"triple threat."* A senior architect wrote he'd *"hire me in a second to fix any wayward project."*

I want to own features from problem to shipped solution, with the product instincts I've built and the technical depth I never lost. Whether that's called Product Engineer, Product Architect, or Product Manager, it's the work I want to do.

## TECHNICAL SKILLS

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**Platforms & APIs:** gRPC ecosystems, service architectures, developer tools, cross-language integrations

**Full-Stack:** Next.js, React, TypeScript, Supabase, Vercel, Node.js

**Data:** PostgreSQL, Elasticsearch, real-time analytics, Grafana

**Languages:** TypeScript, Python, C++, LabVIEW, TestStand

**Cloud:** AWS (Cloud Practitioner certified), Azure, Vercel, Supabase

**AI:** Claude Code (development velocity), Gemini API, Google Cloud TTS (product features)

## PROFESSIONAL EXPERIENCE

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### Principal Software Engineer - Measurement Data Services

NI (Emerson Test & Measurement) • Aug 2025 - Present

- Deliberate return to hands-on technical work to directly guide product behavior as part of R&D.
- Defining data logging patterns and guiding teams on electronics manufacturing customers.
- Targeting newly created Product Architect role: part implementer, part tech lead, part product manager.

### Principal Product Manager - InstrumentStudio

NI (Emerson Test & Measurement) • Jan 2022 - Aug 2025

- **Delivered gRPC infrastructure that had been stuck 2 years in concept/negotiation.** Shipped NI's first desktop gRPC ecosystem in 1 year with support for multiple programming languages and training for early adopters.
- **Defined and launched InstrumentStudio Professional Edition from start to finish** - I aligned many stakeholders, led multiple teams and delivered the launch keynote at NI Connect to thousands of attendees.
- 33% faster feature delivery through telemetry-driven prioritization across 3 teams and 4 business units.

### Principal Product Manager - SystemLink

NI • Jul 2019 - Jan 2022

- **Redirected product stalled on vision.** Cast direction using domain expertise, provided daily guidance. Shipped Parametric Data Viewer in one quarter which became the most customer-loved feature.
- 50% faster queries via PostgreSQL migration, unlocking analysis of terabytes of test result data.

- Upgraded legacy dashboards to Grafana which contributed to a multi-million dollar enterprise account win.

## Senior Software Architect - Test Development Services

NI • Jul 2012 - Jun 2019

- **Rescued manufacturing test framework that had been stuck for 3 years at only 50% complete.** Shipped to all NI manufacturing in 1 year, zero downtime. Still validates billions in hardware.
- **Identified need and persuaded leadership to invest in test abstraction library.** Reusable across phases, products, and instrumentation. Saved hundreds of hours, especially in RF test.
- 80% faster software changeover via automated imaging tool that I initiated, developed and released to manufacturing.
- Supervised/mentored engineers with 1:1s and performance reviews. I was the tech lead establishing team patterns.

## Staff Software Engineer & Project Manager - Vision Acquisition Software

NI • Jan 2006 - Jul 2012

- Developed image acquisition kernel and drivers for framegrabbers and smart cameras.
- Shipped 8 driver releases as project manager over 4 years, balancing quality and schedule.

## INDEPENDENT PRODUCTS

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### Galligraphy - [galligraphy.com](http://galligraphy.com)

- Most sophisticated Circular Gallifreyan generator. 10+ years of algorithm refinement reaching production.
- Next.js, React, TypeScript, Supabase, Canvas API, print-on-demand integration

### Player1 Games - [player1.games](http://player1.games)

- Multiplayer browser games built with my son. Real-time state sync, anonymous matchmaking.
- Next.js 14, Supabase Realtime, TypeScript, Turborepo monorepo. Migrated from Python/Azure.

### PubClerk - [app.pubclerk.com](http://app.pubclerk.com)

- B2B SaaS for publishers: royalty tracking, project management, author portal.
- Next.js, Supabase, PostgreSQL with row-level security. Pivoted from AWS/DynamoDB.

### Audio Adventure - [audio-adventure-one.vercel.app](http://audio-adventure-one.vercel.app)

- Voice-driven interactive fiction. Natural language commands via Gemini, neural TTS narration, in-game Q&A.
- Next.js, React, TypeScript, Gemini API, Google Cloud TTS, Web Speech API.

## EDUCATION & CERTIFICATION

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**B.S. Electrical Engineering** - University of Texas at Austin

**AWS Cloud Practitioner** - Certified 2024