

# David Pfeffer

Engineering leader. Architect. Builder.

[linkedin.com/in/bytenik](https://linkedin.com/in/bytenik) | [github.com/bytenik](https://github.com/bytenik) | [davidpfeffer.net](https://davidpfeffer.net)

Engineering leader and former startup CTO with more than 20 years in software and fintech and more than a decade leading teams. I manage engineers and engineering managers, hire and mentor technical leaders, and stay hands-on with architecture, performance, reliability, and delivery.

Engineering management and mentorship | Product and technical strategy | Rust and TypeScript | Trading and distributed systems | Production reliability

## EXPERIENCE

### THINKalpha Technologies

Director of Software Engineering | October 2017 - Present

Joined as the first product engineer and helped grow the engineering organization, managing engineers and engineering managers while remaining directly involved in the hardest technical problems.

- Build teams through hiring and mentorship; translate user and stakeholder needs into product strategy, architecture, and delivery in partnership with the CEO.
- Own production operations, observability, incident response, and service-level objectives and agreements.
- Designed and built the original TypeScript/Node.js trading system and its Rust successor, including FIX connectivity, execution APIs, durable messaging, and recovery.
- Created a financial query language and distributed research and backtesting infrastructure for large collections of market history.
- Lead AI-assisted migrations using bounded tasks, behavioral parity checks, protocol fixtures, integration tests, benchmarks, and review.

### Ball Street Trading

Co-founder & CTO | 2015 - 2020

Co-founded a consumer sports-trading company and owned product and engineering strategy. Built a real-time trading engine, deterministic settlement, and a shared React application for web, iOS, and Android.

### FunnelFire

Co-founder & CTO | 2012 - 2016

Built a B2B sales-intelligence platform from the ground up, recruited and led frontend and backend engineers, and represented the technical organization through angel and seed funding rounds.

## EXPERIENCE, CONTINUED

### Stevens Institute of Technology

Adjunct Professor | 2011 - 2019

Taught undergraduate, graduate, and professional courses in programming, data structures, systems, low-level TCP/IP, C++, and quantitative finance. Mentored students and experienced engineers.

### APIS Innovation

IoT Software Engineer (part-time contract) | 2017 - 2019

Built embedded firmware, wireless mesh networking, MQTT bridges, and a monitoring and control portal for field-deployed industrial landfill equipment. Worked across hardware, cloud services, and operator workflows.

### FivePM Technology

Co-founder & CEO/CTO | 2010 - 2014

Led a real-time vehicle-tracking and dispatch company spanning Azure, embedded Linux devices, and mobile applications. Added SMS and telephone access informed by a senior-citizen user study.

### Deutsche Bank

Software Engineering Intern / Analyst | 2008 internship; 2009 - 2012 full-time

Built production systems and engineering infrastructure, including real-time log analysis, automated trade-processing tests, and a high-throughput C# framework with C++ and Java interoperability. Helped establish collaborative practices across global teams.

## EDUCATION

### Stevens Institute of Technology

M.S., Computer Science (4.0 GPA)

B.S., Computer Science with Honors; minor in Law and Public Policy

Graduate certificates: Distributed Systems; Enterprise Computing; Computer Systems; Databases & Service-Oriented Architecture; Quantitative Software Engineering; Service-Oriented Computing.

## TECHNICAL AREAS

Rust, Tokio, Axum; TypeScript, Node.js, Fastify, RxJS; FIX and financial protocols; distributed and event-driven systems; OpenAPI and generated clients; market data; observability and incident response.

## INDEPENDENT WORK

First-party apps through ByteNik Solutions LLC: Dark Sky Clock and Garden Eye. Selected public projects include Scoped Assist for Home Assistant, HeyNacho for Slack, and a MongoDB Rust driver change-stream investigation.