



TIMOTHY KRELL

◆ PLAYER-COACH DIRECTOR OF ENGINEERING · 75% BUILDING, 25% LEADING · AI AND WEB3 ◆

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\$33B+
DEX TRADING VOLUME

\$100M+
USER ASSETS SECURED

\$50M+
TREASURY IN CUSTODY

\$300K+
ANNUAL CLOUD SAVINGS

6 → 15
ENGINEERS SCALED

◆ EXECUTIVE PROFILE

Hands-on Director of Engineering who spends 75% of the week writing code on the hardest problems and 25% leading a 15-engineer organization, with 20 years building software, using TypeScript and React since their first releases. Builds O-to-1 products where a bug costs real money: decentralized exchanges with \$33B+ in trading volume, AI trading features for a few thousand beta users, and systems securing \$100M+ in user assets and a \$50M+ treasury. Also cut \$300K+ a year in cloud spend.

◆ PROFESSIONAL EXPERIENCE

SUPER STUDIOS INC.

Remote

Director of Engineering

January 2024 - Present

- ◆ Built and shipped AI-native trading features that let a few thousand beta users create and backtest strategies, routing Claude Sonnet and Haiku via OpenRouter. Code computes every number the model shows, and a code-graded eval suite (~100 cases, frozen market data, fault injection) gates CI releases; its results backed a model switch that cut AI cost per turn ~75%.
- ◆ Scaled engineering from 6 to 15 engineers as company lead engineer, managing seven direct reports, including team leads, and setting technical strategy across parallel gaming and Web3/DeFi product lines.
- ◆ Led O-to-1 builds of the Blackhole and Supernova decentralized exchanges, which have handled \$33B+ in cumulative trading volume and reached \$294M in peak total value locked (TVL), owning architecture, trading interfaces, backend services, and deployment.
- ◆ Protected eight figures in user assets by leading their audited migration to new smart contracts.
- ◆ Held the company's most sensitive access: ran multisig (Safe) treasury and employee token-vesting operations securing \$50M+, and owned production access, key management, incident response, and security audits.
- ◆ Set roadmap, budget, and vendor strategy with C-level leadership; owned engineering planning, contractor management, and hiring for ~7 engineers and contractors.
- ◆ Cut more than \$300,000 in annual AWS and Cloudflare spend by rightsizing infrastructure, building caching layers, insourcing select services, eliminating always-on servers, and renegotiating vendor contracts.
- ◆ Automated DEX voting assignments, cutting ~10 hours a week of manual work and avoiding two additional hires.
- ◆ Cut build-and-deploy time 90%, from 30 minutes to 3, and moved the team from biweekly releases to continuous delivery with multiple production deploys per week by standardizing CI/CD and introducing a monorepo architecture.
- ◆ Built Go services for SuperVerse APIs and blockchain indexing, and architected the *Masters of Mayhem* backend for player accounts, inventory, and game APIs.
- ◆ Grew engineers into senior roles through formal promotions, and led the shift to AI-native development, training 15+ engineers in AI-assisted coding and code review.
- ◆ Embedded as a forward-deployed engineer with marketing, building generative-AI image and video tools, data pipelines, and analytics that automated campaign output and predicted video virality.

Senior Full Stack Engineer and Engineering Manager

January 2022 - January 2024

- ◆ Player-coach managing four direct reports while shipping hands-on alongside them.
- ◆ Launched a portfolio of Web3 products, including staking apps, NFT and token-minting portals for the Impostors collections (\$77M+ in lifetime trading volume), social reward tools, and marketing sites, serving hundreds of thousands of monthly active users.
- ◆ Led GigaMart, an NFT trading platform, from O-to-1: selected the frontend and backend stacks, directed external contractors, and built real-time collection chat.
- ◆ Standardized on strict TypeScript across React and TanStack Start apps, AWS and Cloudflare infrastructure, and EVM smart contracts, cutting incident reports and Sentry errors by 40%.

♦ PROFESSIONAL EXPERIENCE, CONTINUED

THE HELPER BEES *(venture-backed insurtech, Series A and B)*

Remote

Senior Full Stack Engineer and Engineering Manager

April 2020 - January 2022

- ♦ Managed three direct reports at a venture-backed aging-in-place insurtech from its \$6M Series A through its \$12.8M Series B, as the company tripled revenue and connected health plans, older adults, and in-home care providers.
- ♦ Led the migration of four-plus production codebases to TypeScript.
- ♦ Architected a schema-driven frontend component system in TypeScript and JSON that let teams configure partner-specific fields, forms, and workflows without new code, saving hours on every partner onboarding.
- ♦ Lifted a mobile app used by thousands of field workers from a 2.5- to a 4.5-star rating through performance work, telemetry, and safer releases.
- ♦ Built infinite-scroll data views that let users browse hundreds of thousands of records at a smooth 60 FPS.
- ♦ Consolidated duplicated UI patterns into reusable, documented components, eliminating ~20,000 lines of redundant code.
- ♦ Built HIPAA-compliant invoicing, payment, and financial-reporting workflows configurable for multiple health plan and insurance partners.

Freelance Software Engineer

June 2018 - May 2019

- ♦ Modernized a client's legacy web app into a React SPA and trained their developers in JavaScript, React, and React Native.
- ♦ Built iOS and Android apps with React Native, plus an administrative mapping dashboard.

BETHANY ASSOCIATES

Hammonton, NJ

Senior Software Engineer and IT Manager

June 2006 - May 2020

- ♦ Grew from IT support to lead engineer and de facto head of technology, owning all software and IT for a ~30-person company and managing one developer.
- ♦ Built the company's core operations platform from 0-to-1, covering CRM, estimates, scheduling, dispatch, inventory, invoicing, payments, and reporting, and powering service for tens of thousands of customers across three states.
- ♦ Digitized operations end-to-end, replacing paper, spreadsheets, and manual scheduling so sales and office teams could focus on leads and customers as the company grew year over year.
- ♦ Shipped a React Native field app for technicians covering time tracking, e-signatures, navigation, and job details.
- ♦ Automated payroll end-to-end, saving tens of hours every week and improving payroll accuracy.
- ♦ Modernized a legacy PHP app into a React SPA with a custom GraphQL layer over the existing REST backend.
- ♦ Owned all infrastructure and IT operations, including DigitalOcean servers, networking, backups and business continuity, Google Workspace, MDM, and security.

♦ LEADERSHIP AND TECHNICAL EXPERTISE

LEADERSHIP: 0-to-1 product development, engineering strategy, architecture, hiring, mentoring, cross-functional leadership, executive stakeholder management, vendor negotiation, budgeting, contractor management, AI-native engineering

LANGUAGES AND FRAMEWORKS: TypeScript, JavaScript, Go, Rust, Python, React, Next.js, TanStack Start, SolidJS, Vue.js, SvelteKit, React Native, Node.js, Bun, Hono, tRPC, Zod, Drizzle, Prisma, Effect, GraphQL, Tailwind CSS, shadcn/ui, Vite, Vitest, Playwright

AI: AI agents, MCP servers, RAG, vector search (pgvector), LLM evals, OpenAI, Anthropic, and OpenRouter APIs, Vercel AI SDK, Cursor, Claude Code, AI-assisted code review, ComfyUI, generative image and video

CLOUD AND PLATFORM: AWS, Lambda, Cloudflare Workers, Durable Objects, KV, Kubernetes, Docker, Terraform, SST, Vercel, Supabase, GitHub Actions, OpenTelemetry, Datadog, Grafana, Sentry

DATA AND PIPELINES: PostgreSQL, MySQL, Redis, Kafka, ClickHouse, DynamoDB, AWS SQS, ETL, real-time ingestion, event-driven architecture, on-chain indexing, The Graph and subgraphs, Dune

WEB3: DEX, DeFi, multisig treasury, token vesting, EVM, Solidity, Foundry, Hardhat, Viem, Wagmi, Alchemy, L2s including Base, staking, NFTs