Kyrylo Lykho

Lead Software Engineer | Backend / Full-Stack | Cloud & DevOps
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PROFILE

Lead Software Engineer experienced in stabilising and modernising mission-critical, real-time systems and building multi-tenant SaaS platforms end-to-end. Strong background in Node.js/TypeScript, cloud-native delivery (AWS/GCP), CI/CD, and pragmatic performance optimisation across database, API, and frontend layers. Comfortable leading distributed teams, integrating complex third-party platforms, and owning delivery under tight timelines for government and enterprise stakeholders.

TECHNICAL SKILLS

Programming: JavaScript/TypeScript, Go, Python

Backend: Node.js, Effect TypeScript, Nest.js, Express.js, Drizzle ORM, Prisma, FastAPI, REST, GraphQL (Apollo), PostgreSQL, Redis, Firestore, DynamoDB

Frontend: React, Vue, Zustand/Jotai, shadcn/ui, Chakra UI, Vuex

Cloud/DevOps: AWS (Lambda, SQS, EventBridge, DynamoDB), GCP (Cloud Run), Firebase, Terraform, Pulumi, GitHub Actions, CircleCI, Docker

Tooling: Agentic AI workflows, AI coding agents, Turborepo, pnpm workspaces, Sentry, BetterStack, SonarCloud, Spacelift

EXPERIENCE

Senior Software Engineer (Contract) - Mindera

January 2026 - Present

Customer: State Energy Commission (SEC). Greenfield electrification platform delivered for a government energy program.

Role & impact

Senior Software Engineer in the API team for a new AWS-native electrification platform. Built and integrated Node.js/TypeScript backend services using a serverless, event-driven architecture with AWS Lambda, SQS, EventBridge, DynamoDB, PostgreSQL, Drizzle ORM, and Effect TypeScript. Worked in a domain-driven monorepo using Turborepo and pnpm workspaces, with separate Lambda connectors and least-privilege AWS security boundaries across service domains.

Contributed to an AI-first greenfield delivery approach, where the team aimed to generate and maintain a high proportion of the codebase through agentic AI workflows. Helped establish engineering practices and automation that improved the quality, repeatability, and usefulness of AI-generated output, including custom agent skills, CLI tools, environment-aware test workflows, and end-to-end tests across multiple deployment environments.

Owned complex integration work with a third-party provider, navigating unclear platform behaviours, validation edge cases, stakeholder coordination, and compressed delivery timelines. Worked directly with agency stakeholders, the third-party provider, and internal teams to unblock delivery and support a successful production launch.

Key achievements

- Helped deliver a new greenfield electrification platform for SEC within a short delivery window.
- Built and integrated event-driven API services on AWS using Lambda, SQS, EventBridge, DynamoDB, PostgreSQL, Drizzle ORM, and Effect TypeScript.
- Delivered a challenging third-party platform integration by working through API constraints, validation behaviour, and cross-organisation stakeholder dependencies.
- Improved AI-assisted delivery workflows by creating reusable agent skills, CLI automation, and testing patterns to raise code quality and reduce manual handover friction.
- Contributed to a secure, domain-driven monorepo architecture with isolated service connectors and least-privilege AWS permissions.

Responsibilities

- Developed backend APIs and serverless workflows for the electrification platform.
- Designed and implemented integration flows with external provider APIs, including error handling, validation, and environment-specific testing.
- Supported AI-first engineering practices through agent tooling, repeatable workflows, and end-to-end quality checks.
- Collaborated with product, frontend, agency, and third-party stakeholders to clarify requirements and deliver under tight timelines.

Tech: TypeScript, Node.js, Effect TypeScript, AWS Lambda, SQS, EventBridge, DynamoDB, PostgreSQL, Drizzle ORM, Turborepo, pnpm workspaces, Docker, GitHub Actions

Lead Software Engineer - CommandPost

January 2025 - Present

Emergency management and crisis response platform used by government organisations and large-scale public events.

Role & impact

Led stabilisation and performance optimisation of a real-time emergency management and crisis response platform used by government customers and at large-scale public events. Took ownership of end-to-end performance across backend and frontend, including React-based UI work (legacy application) such as bundle optimisation, rendering improvements, and UI responsiveness under load. Improved reliability under tight deadlines by refining database queries, improving data access patterns, and tightening observability and incident response workflows. In parallel, led redevelopment of core parts of the system on a modern stack, aligning engineering execution with security and delivery expectations for government and enterprise use. Managed a distributed team of engineers and contractors, coordinating technical delivery, prioritisation, and day-to-day mentorship.

Key achievements

- Reduced production bottlenecks by improving query patterns and backend data access flows, lowering database load and improving response times.
- Improved frontend responsiveness by optimising the React application (bundle size, rendering hot paths, and UI performance).

- Delivered critical stabilisation work while keeping feature delivery moving in a legacy codebase.
- Led redevelopment efforts using a modern cloud stack to improve maintainability, scalability, and delivery velocity.
- Ran delivery across a distributed team, balancing stability, performance, security, and stakeholder timelines.

Responsibilities

- Technical leadership across stabilisation, performance, and modernisation initiatives (backend and frontend).
- Architecture and implementation of backend services, data layer improvements, and observability/incident response workflows.
- Optimised legacy React UI performance and coordinated delivery across a distributed team while meeting security and reliability standards.

Tech: GCP, Cloud Run, React, Vue.js, Node.js/Nest.js, PostgreSQL, Prisma, Firebase

Development Lead - TIG Freight Management

July 2022 - December 2024

Freight management business; built a multi-tenant SaaS freight management platform.

Role & impact

Owned architecture, design, and delivery of a multi-tenant SaaS platform from requirements through deployment. Led a cross-functional team (frontend, backend, DevOps) and shipped core platform capabilities with emphasis on maintainability and dependable releases.

Key achievements

- Led the full SDLC from discovery/design to production rollout.
- Delivered backend services using Node.js/Nest.js with GraphQL (Apollo) and PostgreSQL via Prisma.
- Built and evolved a React frontend using modern state management and component libraries.
- Implemented CI/CD for backend and frontend monorepos using GitHub Actions to automate build, test, and deployments.

Responsibilities

- End-to-end technical ownership: architecture, system design, and delivery planning.
- Hands-on development across backend/frontend; reviews and mentoring.

Tech: TypeScript, Node.js, Nest.js, Apollo GraphQL, Prisma, PostgreSQL, Firebase, React, GitHub Actions

Senior Software Engineer (Contract) - AgileEngine

September 2021 - March 2022

Consulting / product delivery; delivered an MVP office booking management system.

Role & impact

Built an MVP office booking system and strengthened infrastructure foundations for future growth, including infrastructure as code and service framework standardisation.

Key achievements

- Delivered an MVP office booking management system using Node.js/Express.js on GCP.
- Introduced Terraform for infrastructure as code to improve repeatability and environment consistency.
- Migrated existing services to Nest.js to improve maintainability and scalability.

Tech: TypeScript, Node.js, Express.js, Nest.js, GCP, Terraform

DevOps Engineer (Contract) - Deliveroo

February 2021 - August 2021

Food delivery platform; DevSecOps and developer experience tooling.

Role & impact

Worked in a DevSecOps context to improve infrastructure modules and internal tooling, supporting secure and efficient delivery.

Key achievements

- Designed and maintained AWS Terraform modules aligned to security best practices.
- Supported timely vulnerability patching and compliance across shared infrastructure components.
- Built internal developer experience tools in Go to automate workflows and reduce engineering friction.

Tech: AWS, Terraform, Go

Full Stack Engineer (Contract) - Black Swan Data

August 2020 - February 2021

In-flight entertainment system and management cloud platform; portable on-plane Linux servers.

Role & responsibilities

Full-stack engineer on an in-flight entertainment system and management cloud platform. Built React/Redux UI and Node.js/Express/Sequelize APIs, and supported portable Linux on-plane servers. Designed hash-based syncing so clients fetch only changed media/metadata from a master server.

Key achievements

- Designed hash-based manifests to detect changed media/metadata and download only the required components, reducing bandwidth and sync time.
- Delivered end-to-end features across UI, API, and Linux edge runtime in constrained environments.

Tech: JavaScript/TypeScript, React, Redux, Node.js, Express.js, Sequelize, Linux

Earlier experience

- Engineering Team Lead - Yojji (2019-2020): React/Redux, Node.js/Nest.js; owned SDLC and stakeholders.
- Frontend Developer - Shelf.Network (2018-2019): Vue/Vuex; shipped blockchain-based marketplace white-label marketplace.
- Frontend Developer - NIX Solutions (2017-2018): React/Redux; Python/Django.

EDUCATION

Master's Degree in Automation and Computer-Integrated Technologies - Kharkiv National University of Radio Electronics, Ukraine