

Avi Koenig

Backend-oriented Full-Stack Developer · React · Node.js / TypeScript

avi@koenig.co.il | 054-6912072 | linkedin.com/in/avi-koenig | Israel — open to fully-remote (worldwide)

SUMMARY

Backend-oriented Full-Stack Developer with **8+ years** building and owning production systems end-to-end. Most recently the **sole engineer** behind a factory's entire ERP-integrated Manufacturing Execution System — web, mobile, backend, OCR, and CI/CD. Deep in **Node.js/TypeScript** and **React/Next.js**, with a track record of legacy modernization, real-time systems, and clean, typed architectures. Fully remote and async-ready.

CORE SKILLS

Languages: TypeScript, JavaScript (Node.js), Python, PHP, SQL (T-SQL / PL-SQL), C#

Backend: Node/Express, NestJS, Next.js, FastAPI, GraphQL, Socket.IO (real-time), REST, Kafka

Frontend: React / Next.js, MUI, Tailwind, Vue 3 / Nuxt, React Native (Expo)

Data: MS SQL Server, MongoDB, Oracle, Elasticsearch; ERP integration (Priority), query optimization

DevOps: Docker, GitHub Actions CI/CD, PM2, AWS (S3/Lambda); TDD (Jest/Vitest), Playwright

Auth / Sec: NextAuth, JWT, RBAC, argon2, Azure AD / NTLM, PCI-compliant systems

EXPERIENCE

Full-Stack Developer — Anak Group, Yavne, IL Mar 2025 – Present

Sole engineer for the software platform of a 40-year metal-cladding / CNC manufacturer.

- Built, as the **only developer**, a **Priority-ERP-integrated Manufacturing Execution System** — a Next.js/React management app, a Vue 3 real-time shop-floor PWA, and Node/Express TypeScript backends over MS SQL Server — **adopted company-wide, from managers to shop-floor workers.**
- **Replaced chaotic manual processes and inventory mismanagement with a single system of record**, making production and inventory measurable for the first time.
- Led a full **JavaScript → TypeScript modernization**, re-architecting a monolith into typed Express 5 + Next.js services (v1→v2→v3) with a shared-types monorepo.
- Built a **real-time shop-floor PWA** with Socket.IO live station monitoring, offline IndexedDB caching, and full Hebrew/RTL support for factory tablets.
- Integrated **CNC sheet-nesting optimization** (smart2d) into production planning with automated write-back to the ERP; shipped a **React Native (Expo)** barcode-scanner app for packaging staff and a **Python/FastAPI OCR service** (Tesseract) to extract structured data from PDFs.
- Owned **auth/RBAC** (NextAuth, argon2, Azure AD/NTLM) and **CI/CD** (Docker, PM2, GitHub Actions webhook auto-deploy to on-prem).

Backend Infrastructure Developer — FLARE Jan 2023 – Jun 2024

- Built **NestJS microservices** with GraphQL, MongoDB, and AWS (S3, Lambda) supporting **pre-IPO readiness**.
- Expanded financial auditing and monitoring; integrated with **Deloitte & NetSuite for PCI compliance**.
- Maintained quality with **TDD (Jest)** across scalable, maintainable services.

Backend / Integrations Developer — Tictuk Mar 2021 – Dec 2022

- Built scalable backend services (Node.js, TypeScript, MongoDB, Elasticsearch) for a **real-time order-management system** under high load.
- Designed integrations across diverse data sources; optimized DB queries and API workflows to cut response times.
- Automated data-synchronization tasks, reducing manual work and error rates.

Full-Stack Tech Lead — Partner Telecom Jul 2020 – Feb 2021

- Introduced **Agile + CI/CD**, Docker, and standardized Node.js builds to speed delivery and onboarding.
- **Migrated C# .NET + Oracle PL/SQL services to Node.js**, decoupling PL/SQL logic for better performance and flexibility.

Full-Stack Developer — Eden Internet Systems May 2017 – Jun 2020

- Built a **SaaS ERP for moving companies** (Node.js, Kendo UI, SQL) — dispatch management and quoting tools.
- **Modernized an 18-year-old legacy system** to a Node.js + SSR architecture for better performance and maintainability.

- Earlier: Helpdesk & IT at Eden, 2011–2017.

EDUCATION & ADDITIONAL

Coding Academy Israel — Full-Stack Development, 2020

IDF — Drill Instructor, 2004–2007 (leadership & training)

Languages: Hebrew (native), English (native), French (conversational), Portuguese (basic, improving)