

# PAVITTAR SINGH

📍 Uttarakhand, India  
📞 +91 90120-90666  
✉ pavittar@gmail.com

🌐 pavittarx  
🌐 in/pavittarx  
🌐 pavittarx.com

## Senior Software Engineer · Backend & Full-Stack

Senior software engineer with 6+ years building product-grade backends and full-stack web apps for SaaS and consumer startups. Currently focused on scalable Node/NestJS systems on AWS, with hands-on AI and agentic tooling.

### WORK EXPERIENCE

Jul 2025 – Present

#### Senior Software Engineer

Kuby Ltd. · Cyprus · Remote

- Architected a scalable backend on **NestJS, TypeScript, PostgreSQL, and Prisma**, running on **AWS**.
- Re-architected a fragmented microservice application into a **modular monolith**, reducing operational complexity and tightening deploy cohesion.
- Shipped a **multi-portal Next.js frontend** (customer, companion, admin) on Vercel, routing legacy reseller domains through Next.js middleware to preserve existing URLs.
- Designed a **Handlebars strict-mode email-template pipeline** with environment-aware URL substitution across staging and production, eliminating a class of broken-link bugs.
- Led a data migration from legacy **MongoDB and MySQL** to **PostgreSQL** via custom Python ETL scripts, standardizing data format.
- Migrated file storage from EFS to **AWS S3**, cutting **cloud storage costs by 92.5%**.
- Built the staging CI/CD pipeline on **GitHub Actions** → **Docker** → **EC2**, standardizing release cadence; added **Jest** coverage across NestJS APIs.
- Built internal **AI agents and dev tooling on the Anthropic Claude SDK**, and ran **Claude Code** as a daily IDE pair — accelerating architecture exploration, code review, and refactors.
- Owned **cross-functional communication with founders and product leads** on launch scope, production-crisis triage, and roadmap alignment across a remote, multi-time-zone team.
- Stood up team **operating cadence** — Slack, Trello, and structured release/triage process — for an early-stage engineering function.

Aug 2024 – Jun 2025

#### Career Break — MCA & AI Upskilling

- Completed **Master of Computer Applications (MCA)** from IGNOU, finishing coursework deferred during prior full-time roles.
- Deep-dived into **agentic frameworks, LLM tooling, and RAG** through hands-on prototypes — directly applied at Kuby.

Aug 2023 – Jul 2024

#### Senior Software Engineer

Karmasuite · San Francisco, US · Remote

- Drove core development of Karmasuite's **non-profit grant-management SaaS** on **Next.js, tRPC, PostgreSQL (NeonDB), Prisma, and Inngest**.
- Owned the **Fund Management module**, letting organizations create and oversee multiple funds with distinct budgets and objectives.
- Built a fine-grained **Permission Management System** on Clerk + tRPC, enforcing role-based access across pages and APIs.
- Optimized API performance by trimming response payloads, splitting endpoints, and substituting raw SQL where Prisma was a bottleneck.
- Shipped reusable React + Tailwind UI components and AG Grid spreadsheets with save-as-you-edit semantics.

Dec 2021 – Aug 2023

#### Frontend Engineer (SDE I)

Kenko Health · Bengaluru, India

- Owned **kenkohealth.in** end-to-end on Next.js, TypeScript, MUI, and Redux for the consumer health product.
- Mentored a team of **3 frontend developers**; enforced quality with ESLint, Husky, and Prettier.
- Improved site speed by ~60%** via SSR, code-splitting, lazy loading, and Lighthouse-driven audits — lifting SEO and reducing bounce.

### SKILLS & TOOLING

#### Backend

Node.js NestJS Express.js tRPC  
Prisma PostgreSQL MongoDB MySQL  
Inngest Firebase

#### Frontend

React Next.js Redux Tailwind CSS  
Material UI Radix UI React Query  
React Hook Form Framer Motion

#### Languages

TypeScript JavaScript Python SQL  
HTML CSS/SCSS

#### DevOps & Platforms

AWS (S3 EC2 EFS) Docker Vercel  
GitHub Actions Git

#### Tools & Testing

Jest Playwright ESLint Prettier Sentry  
Jira Linear VSCode

### EDUCATION

2022 – 2025

#### Master of Computer Applications (MCA)

IGNOU · New Delhi, India

2015 – 2018

#### Bachelor of Computer Applications (BCA)

IGNOU · New Delhi, India

### PROJECTS

#### drill

2026 🔄

AI-powered daily workout app — personalized workouts generated by Claude with exercise swaps and set/rep logging.

**Tech:** TypeScript, Anthropic Claude SDK

#### mechadealer

2024 🔄

FinTech platform letting retail investors deploy and monitor automated trading strategies with real-time performance metrics.

**Tech:** Python, FastAPI

#### editorjs-html

2020 · 379 stars 🔄

Open-source library converting Editor.js JSON into clean semantic HTML. 379 GitHub stars, actively maintained, published on npm.

- **Cut infrastructure cost by ~40%** by moving the Next.js app to AWS via the Serverless Framework.
- Built a B2B internal portal on MUI, react-admin, React Query, and React Hook Form.
- Designed and shipped **Kenko Quiz V3** — a conditional-path health assessment journey serving **50K+ users**.
- Instrumented UTM-tracked user journeys, enabling marketing to measure and optimize campaign funnels.
- Integrated Sentry for real-time error tracking, shortening bug-resolution cycles.

May 2021 – Nov 2021

## MERN Stack Developer

Applere Technologies · India

- Delivered **4 end-to-end web applications** (e-commerce, sales, recruitment) — full-stack ownership from architecture to production.
- Built **JK Sales Smart** on React with **real-time SAP API sync** via Node.js Event API and Socket.io.
- Standardized deployments across projects on **AWS EC2** with NGINX, PM2, and a GitHub deploy pipeline.
- Mentored 3–5 junior developers via code reviews and served as primary technical liaison to clients.
- Used **AWS S3** for secure file storage and Node.js + cron for task automation.

Jul 2020 – Dec 2020

## JavaScript Developer

The Loot · Tamil Nadu, India · Freelance

- Launched and maintained *theloot.app*, a full-stack K-12 educational platform.
- Engineered a **user-engagement and Rewards system** on **Firestore Cloud Functions** in a microservice layout.
- Built an internal **React** dashboard for data management, monitoring, and admin decision-making.
- Managed the **Firestore** backend for secure, efficient data storage and retrieval.

Nov 2019 – Apr 2020

## Web Developer

Augment Systems · New Delhi, India · Internship

- Maintained the **Orders Management** project on TypeScript, Angular, and Node.js.
- Built a proprietary **Citation Engine** auto-generating correctly formatted academic citations.
- Assisted with **AWS EC2** deployment and maintenance.

Tech: TypeScript, Rollup, Jest, npm

## Conway's Game of Life

2025  

Web-based simulation visualizing how complex evolving patterns emerge from simple rules.

Tech: React, TypeScript

## BLOGS

Unique IDs... Which is the best? 

How consistent hashing scales distributed systems 

Deciphering CAP: The fundamental trade-off in distributed systems 