

Karthik K

Palakkad, Kerala, India | karthikk7293@gmail.com | +91 7293103936
<https://www.linkedin.com/in/karthik-thedeveloperdot> | <https://github.com/Karthikk7293>

Summary

Full-Stack Software Engineer with **4+ years of experience** building and scaling production systems that move money — **payments, virtual wallets, cashback, spend ledgers, reconciliation, and admin platforms**. Strong hands-on experience with **Next.js, NestJS, TypeScript, Redis, MongoDB, PostgreSQL, Firestore, and AWS**. Currently own the money layer of an internal operations platform: third-party wallet webhook ingestion, derived balances, multi-source expense ledgers, invoicing, and AI-assisted document verification. Improved application performance by **75%** through caching and search optimization. **Passionate about system design, scalability, and ownership-driven engineering** in fast-moving startup environments.

Technologies

Languages: TypeScript, JavaScript, Python, Java

Frontend: React.js, Next.js (App Router), Tailwind CSS, Zustand

Backend: Node.js, NestJS, Express.js, Next.js API Routes, Django (REST APIs)

Database: MongoDB, PostgreSQL, Firestore, SQL

Caching & Search: Redis, Meilisearch

Payments & Money Systems: Razorpay, PayPal, Payment-Bank & Wallet APIs, wallet webhook ingestion, invoicing, ledgers & reconciliation

Cloud, DevOps & Infrastructure: AWS EC2, AWS S3, Docker, GitHub Actions, Vercel, Render

Auth, Storage & BaaS: Firebase (Auth, Firestore, Cloud Storage, FCM)

AI & Automation: Anthropic Claude API, OpenAI, OCR pipelines, Puppeteer

Tools: Git, GitHub, Figma, Capacitor (Android)

Experience

Software Development Engineer 1, Spacez Pvt Ltd – Bengaluru

May 2025 – Present

- Built **CashBook**, the company-wide spend and wallet platform: ingests a **live third-party wallet webhook feed** and **derives per-member wallet balances** from a seed baseline plus an immutable cash-movement log, since the provider exposes no balance API.
- Consolidated **7 heterogeneous spend sources into a single reconciled expense ledger**, normalising paise/rupee units and separating cash movements from actual spend to eliminate double counting.
- Shipped **AI-assisted proof verification** for expense claims — bills and receipts are OCR'd and validated against claimed amounts via the Claude API, with results cached per document; added an edit-distance classifier to auto-attribute untagged spends.
- Built the **invoicing engine** end-to-end: B2B proforma and tax invoices, editable issued documents, canonical invoice numbering, add-on line items, and server-side PDF generation with in-app preview.
- Own **payment flows** on spacez.co — Razorpay integration, pricing and coupon engine (including private coupon allowlists), and **payment-behaviour analytics** instrumented across the full booking funnel with anonymous-to-customer identity stitching.
- Designed and shipped **Spacez PMS**, an internal operations console spanning **55+ modules** (bookings, calendar, pricing, invoices, expenses, cash ledger, issues, media, communications) with a **per-section role-based access model**.
- Built external **owner and franchise portals** — revenue-only money views, shared statements, per-owner section access, and a staff-side request queue backed by a shared conversations engine.
- Led the **end-to-end redesign of spacez.co** on Next.js App Router using SSR, SSG and ISR; delivered a post-booking add-on purchase flow and an invite-to-join booking system with short links and rich share previews.
- Authored the **PMS design system and a custom design-lint rule set** enforced in prebuild and pre-commit, so design-system violations fail the build; shipped the caretaker **Android app** as a Capacitor shell with FCM push and a delivery audit trail.

Freelance MERN Stack Trainer, One Team Solutions Edtech Pvt Ltd — Kochi

Jan 2025 – Nov 2025

- Designed and delivered industry-oriented **MERN stack training**, emphasizing real-world architecture, API design, and scalability.
- Mentored developers on **production-ready practices**, including authentication, database design, and frontend–backend integration.

Associate Frontend Developer, Auxxweb Solutions – Calicut

Jun 2024 – Dec 2024

- Built **EnConnect**, a **multi-tenant business platform** enabling companies to create customizable public profiles using tiered templates (basic to premium).
- Implemented a **multi-level admin panel** with granular role-based access control.
- Delivered a scalable frontend architecture that supported business growth and onboarding at scale.

- Led the end-to-end redesign of a fintech platform handling **cashback, payments, and admin operations**, modernizing both frontend and backend architecture.
- Reworked **database schemas** to support evolving business logic and higher transaction throughput.
- Improved overall application performance by **75%** by introducing **Redis caching** and **Meilisearch**, significantly reducing load and search latency.
- Built and maintained **advanced admin panels** to manage users, transactions, offers, and operational workflows.
- Integrated multiple **payment gateways and bank APIs** for a **virtual card & wallet-based web application**, ensuring secure and reliable financial transactions.
- Contributed to the launch of **multiple new revenue-generating products**, collaborating closely with business and marketing teams.

Key Products Built

Spacez PMS & CashBook (internal platform)

in-house

- 55+ module operations console with role-based access, invoicing, a multi-source expense ledger, wallet webhook ingestion, AI proof verification, and external owner/franchise portals.
- Tools Used: Next.js (App Router), TypeScript, Firestore, Firebase Admin, Zustand, Tailwind, Claude API, Recharts, React-PDF

Spacez.co

www.spacez.co

- Scalable web platform redesigned for improved performance and maintainability, using Next.js with modern rendering strategies (SSR, SSG, ISR).
- Tools Used: Next.js, TypeScript, Firebase, Tailwind, Razorpay payment gateway

Indiencashback

www.indiencashback.com

- Re-designed the application and its admin panel with new features and business logic.
- Tools Used: Admin side: React.js, Express (TS), MongoDB, Bootstrap; User side: Next.js (TS), Nest.js, Tailwind, MongoDB, Redis, Meilisearch, Razorpay payment gateway

ICB Instantpay web app

card.indiencashback.com

- Developed a virtual card / wallet web application with InstantPay payment-bank API support.
- Tools Used: Next.js, Nest.js, MongoDB, Tailwind

ICB Influencer web app

- Designed and developed the ICB influencer community portal for collaborating influencers.
- Tools Used: Next.js, React.js, Express.js (TS), MongoDB, Tailwind, Bootstrap

Split App (money management web app)

- Money management web app to split and manage money for individuals and groups, with chat features and a minimal design.
- Tools Used: Next.js, MongoDB

EnConnect web app & Admin panels

www.enconnect.in

- Collaborative platform enabling multiple businesses to showcase their profiles using customizable templates ranging from basic to premium tiers.
- Tools Used: React.js, Express.js (TS), MongoDB, Bootstrap, Tailwind

Education

Scaler Academy – Software Development Engineer (SDE)

- Advanced DSA, Advanced SQL
- High-Level Design (HLD), Low-Level Design (LLD)

Brototype – Full-stack Development (MERN)

Dec 2021 – July 2022

IPT And GPTC – Diploma in Electronics Engineering

June 2018 – Oct 2021