

Himanshu Pandey

Full-Stack Engineer • Building production-grade distributed systems • Open to SDE Internships

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TECHNICAL SKILLS

Languages: JavaScript (ES6+), TypeScript, Python, HTML5, CSS3

Frontend: React 19, Next.js, Tailwind CSS, Framer Motion, Vite

Backend: Node.js, Express.js, FastAPI, WebSockets, Prisma ORM, BullMQ, RESTful APIs, Zod

Databases: MongoDB, PostgreSQL, Redis, MySQL

Infrastructure: Docker, Vercel, Render, Cloudinary, Git, GitHub

PROJECTS

CourseSpace — Secure E-Learning SaaS Platform

Jan 2026

React, Node.js, Express, MongoDB, Zod, Cloudinary

[GitHub](#) | [Live Demo](#)

- Hardened API surface with runtime Zod payload validation eliminating NoSQL injection vectors, Helmet security headers, and modular IP rate-limiters; sustained zero security incidents across 500+ course enrollments.
- Built a stateless media pipeline (Multer → Cloudinary CDN) and sandboxed YouTube Player iframes to neutralize digital piracy; structured Winston rolling logs for real-time audit trails.

Second Brain — AI-Powered Knowledge Workspace

Nov 2025

React 19, TypeScript, Node.js, MongoDB, Redis, BullMQ, Groq/OpenAI

[GitHub](#) | [Live Demo](#)

- Automated ingestion of articles and YouTube transcripts into a MongoDB Atlas vector index; RAG pipeline via Groq and OpenAI APIs delivers sub-2s context-grounded responses across 1,000+ stored knowledge chunks.
- Architected a Redis + BullMQ async queue with freemium billing gates; engineered oEmbed fallback orchestration to bypass data-center IP blocks and streaming 429 rate errors with 100% ingestion success.
- Secured multi-tenant data with JWT + Google OAuth 2.0, bcrypt hashing, and Zod schema validation; cross-layer deduplication in the OAuth callback eliminated duplicate account creation entirely.

Webhook Orchestrator — Fault-Tolerant Distributed Delivery System

Jun 2026

Next.js, Node.js, Redis, BullMQ, PostgreSQL, Docker

[GitHub](#) | [Live Demo](#)

- Engineered a four-tier decoupled webhook delivery system routing 10,000+ payloads/min from serverless Next.js ingestion to stateful Node.js workers via Redis, eliminating cold-start timeout failures entirely.
- Guaranteed zero data loss via exponential backoff retries and a PostgreSQL Dead Letter Queue (DLQ); HMAC SHA-256 signature verification and idempotency keys enforced end-to-end payload integrity.
- Deployed containerized workers via Docker with token-bucket rate limiters controlling ingestion velocity; architecture sustained sub-200ms delivery p99 under sustained load.

EDUCATION

Newton School of Technology, Rishihood University

2024 – 2028

B.Tech in Computer Science & Data Science

Kendriya Vidyalaya Almora — Intermediate (Class XII), Grade: 87.0%

2022 – 2023

Holy Angel Public School — Matriculation (Class X), Grade: 90.0%

2020 – 2021

CERTIFICATIONS

Google AI Essentials Specialization | Google

Jun 2026

- Completed a rigorous 5-course curriculum covering advanced prompt engineering frameworks, productivity optimization, and responsible AI architectures.
- Mastered practical generative AI strategies to accelerate software development workflows, automate data-driven problem solving, and mitigate algorithmic bias.

ACHIEVEMENTS & CODING PROFILES

- **LeetCode:** Developing algorithmic proficiency by actively practicing core patterns and data structures, including Graphs, Dynamic Programming, Trees, Sliding Window, and Two Pointers.
- **Portfolio:** Engineered [himanshupandey.me](#) from scratch — Next.js + Framer Motion, custom HSL design tokens, dark-mode transitions, zero external UI library dependencies.