

ANSHUMAN VERMA

Senior Software Engineer — AI Systems (RAG, Agents, LLMs) · Python · Java · Full-Stack

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SUMMARY

Software engineer with **18 years** of experience, from a decade of enterprise Java at **HCL Technologies** (Cisco, Telstra, Symantec, Openwave) to independent work shipping production **GenAI** systems directly for clients. I build RAG pipelines that cite their sources, tool-calling agents with human confirmation, MCP integrations and LLM evaluation, together with the auth, billing, observability and deployment that make them real products. IIT Roorkee graduate. Available for freelance, contract and full-time remote work.

CORE SKILLS

AI / GenAI	RAG, embeddings, pgvector, LLM integration (OpenAI, Claude, Gemini), function/tool calling, AI agents, MCP, LangChain, Vercel AI SDK, structured outputs, model routing & failover, LLM regression testing & evals
Backend	Python, FastAPI, Java, Spring / Spring Boot, .NET (C#), Node.js, Laravel, REST, GraphQL, WebSockets, SSE, microservices
Frontend	React, Next.js, Vue, Nuxt, Angular, TypeScript, Tailwind CSS
Data	PostgreSQL, pgvector, MySQL, Redis, SQLAlchemy, Drizzle; Pandas, BeautifulSoup, Selenium, OCR (Tesseract)
Workflows & DevOps	n8n, Inngest, Docker, Jenkins, CI/CD, Git, Linux, AWS, Vercel, Neon, Supabase, Ansible, Maven
Product	Stripe and Razorpay billing, OAuth / JWT / RLS, multi-tenancy, audit logging, testing (JUnit, Pest, Vitest, Playwright)

EXPERIENCE

Freelance AI & Full-Stack Engineer — Independent Consultant (Remote) 2018 – Present

- Design and build AI products and full-stack platforms end to end for clients in the United States, Italy, the UK, Cyprus, Greece and India: requirements, architecture, implementation, testing and deployment.
- Ship production GenAI: RAG with clause-level citations, multi-model routing with failover, semantic caching, tool-calling agents with confirmation controls, MCP servers and automated evaluation of probabilistic output.
- Build backend services and APIs in Python (FastAPI), .NET, Java and Laravel, with React / Next.js / Vue / Nuxt frontends, PostgreSQL + pgvector, Redis and Docker.
- Earlier client work: web, mobile, e-commerce and AR/tourism apps for European clients; OCR pipelines for scanned Italian documents; data automation with Pandas, BeautifulSoup and Selenium.

Selected projects

Echo Prompter — enterprise AI prompt-automation platform (US client). Architected a .NET core managing parallel execution agents for 10–100× faster prompt processing; Python orchestration across ChatGPT, Gemini and Claude; regression and load testing to detect drift and hallucinations; real-time cost tracking. .NET · Python · REST · LLM testing

BriefPilot — contract-review RAG platform (briefpilot.in). PDF/OCR ingestion, legal-aware chunking, pgvector retrieval, streamed answers with clause citations, multi-document reconciliation, playbook grading, Claude/GPT-4o failover, 0.94-cosine semantic cache, Stripe billing. FastAPI · React · PostgreSQL/pgvector · LangChain · Supabase · n8n

AgentLoom — visual AI workflow automation with MCP. 14-node DAG canvas, webhook/cron triggers, durable execution with Inngest, multi-model agents, JSON-RPC MCP integration with SSRF guardrails, AES-256-GCM credential vault, per-node cost tracking. Nuxt 4 · Vercel AI SDK · Inngest · Neon · Upstash Redis

Stackboard — real-time task board with an AI agent. WebSocket collaboration with Redis pub/sub across instances, role-based access, keyset-paginated audit log; OpenAI tool-calling agent that returns reviewable plans before bulk or destructive changes; embedding-based duplicate detection. Next.js 16 · FastAPI · PostgreSQL · Redis · OpenAI · Docker

DocuChat — multi-tenant enterprise RAG chatbot. Strict tenant isolation, sub-15 ms vector cache, hallucination evals, Gemini/OpenAI/Claude fallback, WhatsApp/Telegram channels, human handoff, 18 KB embeddable widget, HMAC webhooks; 34/34 Pest suites passing. [Laravel 11](#) · [Vue 3](#) · [pgvector](#)

Thagi Alert — anti-scam citizen portal ([thagialert.in](#)). Gemini 2.5 Flash screenshot threat analysis, fraud lookup API, fund-freeze assistant with legal drafting, WhatsApp/Telegram bots, 8 Indian languages, offline PWA. [Next.js 16](#) · [Payload CMS](#) · [PostgreSQL](#) · [Gemini](#)

Slotly — multi-vendor booking marketplace. Double-booking prevented at the database level with btree_gist exclusion constraints; Razorpay with signed webhooks; GST invoicing; Inngest reminders; mobile REST API. [Next.js 15](#) · [Drizzle](#) · [Neon PostgreSQL](#) · [Turborepo](#)

Software Engineer → Technical Lead — [HCL Technologies](#) 2008 – 2018

Backend Lead / Developer — [Client: Telstra, Australia](#)

- Led backend delivery for a Cloud Service Management Console: requirements analysis, component and architecture design, object-oriented design patterns.
- Built Java backend components with a microservices approach and maintained JUnit regression coverage.
- Developed automation and build/deployment tooling with Java, Jenkins, Maven, VMware vSphere SDK and Git.

Senior Technical Lead / Developer — [Client: Cisco, United States](#)

- Enhanced a Cisco management portal on Java/Spring and JSON REST APIs, improving backend architecture and maintainability.
- Contributed to wireless IP phone functionality; automated CI/builds with Jenkins; worked with Ansible, Chef, Docker, Python and Linux.

Developer — [Clients: Symantec, Openwave, Telstra/Digi](#)

- Delivered antivirus-solution features for Symantec and telecom-domain and e-commerce enhancements for Openwave and Digi, in Java, C# and Python.

CLIENT FEEDBACK

"It's rare to come across someone with the unique combination of knowledge and experience that Anshuman possesses. His contribution to our product has been and will continue to be immeasurable."

Randy Hayes, Loadzilla, United States

"Anshuman is an outstanding full-stack developer with a keen eye for detail and a passion for problem-solving."

Carmine Mattera, CTO, Artensys SRL, Italy

EDUCATION

B.Tech, Electrical Engineering
Indian Institute of Technology (IIT) Roorkee · 2002 – 2006

LANGUAGES

English (fluent) · Hindi (native)