

Bishal Kumar Saha

Full-Stack Developer | Generative AI & Agentic AI Engineer

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Senior Full-Stack Developer with **15+ years** of production experience across Finance, eCommerce, ERP, SaaS, healthcare, and enterprise platforms. Deep expertise in **Node.js (NestJS)**, **Java (Spring Boot)**, **Angular**, **React**, **Next.js** with strong cloud and DevOps background (AWS, GCP, DigitalOcean). Over the past 3 years, specialized in **Generative AI and Agentic AI** — building multi-agent pipelines using Anthropic Claude API, OpenAI API, secure server-side AI routing, prompt engineering, structured outputs, and token cost management. Available immediately for full-time remote engagement.

CORE TECHNICAL SKILLS

DOMAIN	SKILLS
Frontend	Angular 21, React 19, Next.js 21, TypeScript 5.x, RxJS, NgRx and Redux, Bootstrap 5, Tailwind CSS 3, shadcn/ui, Chakra UI, Framer Motion, Recharts, D3.js, Three.js,
Backend	Node.js (NestJS), Java (Spring Boot), Python (FastAPI), PHP (Laravel)
Databases	PostgreSQL, MySQL, MongoDB, Pinecone, Firebase
Generative AI	Anthropic Claude API, OpenAI GPT, LangChain, prompt engineering, structured outputs, streaming responses, Fine tuning & Model Customization
Agentic AI	Multi-agent pipeline design, Agent Tool Orchestration, context injection, RAG (retrieval-augmented generation), semantic search (pgvector)
Cloud / DevOps	AWS (EC2, S3, Lambda, RDS), DigitalOcean, Docker, Kubernetes, CI/CD (GitHub Actions, Jenkin)
Auth & Payments	JWT, OAuth 2.0, Role-Based Access Control (RBAC), Attribute-Based Access Control (ABAC), Stripe, PayPal, Cashfree, webhooks, subscription management
Email & PDFs	ZeptoMail, SendGrid, jsPDF, DomPDF, html2canvas, Puppeteer
Tools & Platforms	IntelliJ IDEA, PhpStorm, PyCharm, Kong API Gateway

GENERATIVE AI EXPERIENCE

AI-Powered Document Analysis Agent

Freelance AI Developer | 2025

- Built a **RAG-based document Q&A agent** for a legal-tech client: ingested contracts and SOW documents, chunked and embedded them via OpenAI Embeddings, stored vectors in **pgvector (PostgreSQL)**
- Designed a **multi-step reasoning pipeline**: document retrieval → context injection → Claude Sonnet generation → structured JSON output → React UI rendering
- Implemented **LangChain agent tools** (search, lookup, summarize) with tool-use callbacks and audit logging

- Added cost guardrails: prompt token budgets per agent type, fallback to Haiku for simple lookups

Stack: Node.js · LangChain · OpenAI GPT-4o · Anthropic Claude · pgvector · PostgreSQL · React · TypeScript

Conversational AI Assistant — Healthcare SaaS

Full-Stack + AI Developer | 2023

- Integrated a **conversational LLM assistant** into a healthcare portal for patient intake and symptom triage
- Built server-side prompt templates with anonymized patient context injection; responses streamed via WebSocket
- Designed **agentic escalation logic**: if agent confidence < threshold → escalate to human review queue
- Ensured PHI compliance: all patient identifiers anonymized before LLM context injection

Stack: Python · FastAPI · OpenAI GPT-4 · PostgreSQL · React · TypeScript · AWS

PROFESSIONAL EXPERIENCE

Freelance IT Consultant & Full-Stack Developer

Self-Employed | 2015 – Present

End-to-end delivery of web applications and SaaS platforms for clients in India, Singapore, and the US. Specializing in Angular, React SPAs, Node.js (NestJS) / Java Spring Boot backends, AWS cloud infrastructure, and AI integration.

Fintech Investment Platform REST API — FinClimb Money

Backend API Developer | Freelance | 2025 – 2026

Play Store App: <https://play.google.com/store/apps/details?id=com.finclimb.money>

API Docs: <https://api.staging.finclimb.money/api-docs>

- Designed and developed a production-grade **REST API for a fintech mobile app** covering Gold trading, SIP (Systematic Investment Plan), and Mutual Fund investments
- Implemented **OTP-based authentication**, JWT token management, refresh token flow, MPIN setup & validation, and secure logout
- Built **Gold Buy/Sell module**: real-time price feeds with hourly/daily/weekly/monthly/quarterly/yearly intervals, multi-step transaction workflows with confirmation, invoice generation, and order status tracking
- Implemented full **SIP lifecycle management**: create, list, pause, resume, and cancel — with **Cashfree webhook** handling for subscription events
- Integrated **Cashfree Payment Gateway**: payment session creation, bank account verification, and success/failure callback processing
- Designed **50+ API and schema models** across Mutual Fund Investment, Gold Transactions, Bank Account Validation, and SIP operations
- Used **Redis** for token/session caching and API rate limiting; PostgreSQL for transactional data integrity

Stack: Node.js · NestJS · PostgreSQL · Redis · Cashfree Payment Gateway · TypeScript · JWT · REST API

Background Verification Platform

Full-Stack Developer | 2022 – Present Day

- Built a complete BGV SaaS with dynamic form-driven workflow, case management, and customizable PDF report generation
- Services: PAN/Aadhaar check, Address verification, CIBIL record, eCourt & Global Database, Educational & Employment verification, Police verification integration
- Hosted on AWS with auto-scaling; S3 for document storage

Stack: Angular · TypeScript · Java Spring Boot · PostgreSQL · AWS (EC2, S3, RDS)

Multi-Vendor E-Commerce Platform — BUY NOW INDIA

Full-Stack Developer | 2021 – 2022 | buynowindia.in

- Built React + Next.js (SSR) multi-vendor platform with product search, inventory, multi-vendor management, online payments, data warehouse, and shipping management
- CI/CD pipeline via GitHub Actions; deployed on AWS

Stack: React · Next.js · TypeScript · Node.js · MySQL · AWS · Stripe

Research & Development — Biomedical Informatics

Researcher & Developer | 2016 – 2021 | Collaboration: IIIT Allahabad

- Built **OlfactionBase** — a curated database of odors, odorants, olfactory receptors, and receptor interactions with interactive Olfaction Wheel visualization
- **Published paper at Oxford Academic / Nucleic Acids Research:** <https://academic.oup.com/nar/article/50/D1/D678/6362078>
- Live app: <https://bioserver.iiita.ac.in/olfactionbase/>
- Applied NLP and data analysis techniques to structure multidimensional biochemical datasets — directly applicable to LLM prompt design and structured AI output engineering

EDUCATION

B.Tech in Bioinformatics — 2007

Foundation in computational biology, data structures, algorithms, and research methodology

Published Research Paper: OlfactionBase — 2022

a repository to explore odors, odorants, olfactory receptors and odorant–receptor interactions

<https://academic.oup.com/nar/article/50/D1/D678/6362078>

<https://pubmed.ncbi.nlm.nih.gov/34469532/>