

# Chetan Raghuvanshi

Bengaluru, India | chetanraghuvanshi85@gmail.com | +91 73098 90799  
linkedin.com/in/chetan-raghuvanshi | github.com/chhhee10 | chetan-portfolio.xyz

## PROFESSIONAL SUMMARY

Software engineer specializing in **AI/ML systems**, **LLM orchestration**, and **full-stack Web & Web3 development** — production experience across multi-agent pipelines, RAG architectures, vector databases, and blockchain platforms. Built systems at scale: grievance portal with 1,250+ MAU; 6-agent AI advisory engine with persistent vector memory and zero-hallucination guardrails.

## EDUCATION

<b>Sir M. Visvesvaraya Institute of Technology, Bengaluru</b> <i>B.E. Computer Science — IoT, Cybersecurity &amp; Blockchain Technology</i>	Aug 2023 – May 2027 GPA: <b>9.04 / 10.0</b> (till 5th Semester)
<b>Harmilap Mission School, Kanpur</b> <i>CBSE Class XII (Higher Secondary)</i>	May 2022 <b>85.6%</b>
<b>Harmilap Mission School, Kanpur</b> <i>CBSE Class X</i>	May 2020 <b>96.6%</b>

## WORK EXPERIENCE

<b>Backend Development Intern</b> <i>BG THub</i>	Apr 2026 – Present <i>Python, FastAPI, Firebase, REST APIs</i>
<ul style="list-style-type: none"><li>Evaluated third-party API ecosystems for a <b>mobility aggregator platform</b> across <b>5+ API vendors</b>, mapping integration complexity and compliance requirements to define the backend engineering roadmap.</li><li>Architected an <b>AI conversational agent</b> — defining intent routing, backend API contracts, and session-state management using RESTful microservices; audited APIs against India's <b>DPDP Act 2023</b>.</li><li>Integrated <b>Firebase</b> (Auth, Firestore, Cloud Functions) into a logistics platform backend, cutting auth setup time by <b>60%</b> and enabling real-time data sync across services.</li></ul>	
<b>Web Developer Intern</b> <i>All India Organization of Pensioners</i>	Feb 2026 – Apr 2026 <i>React, Node.js, TypeScript, Cloudflare</i>
<ul style="list-style-type: none"><li>Built and deployed a full-stack grievance portal sustaining <b>1,250+ MAU</b> and <b>17.6k+ requests/month</b> at <b>98% uptime</b> on Cloudflare with zero-downtime CI/CD via GitHub Actions.</li><li>Engineered an <b>accessibility-first UI</b> for elderly users, reducing task-completion friction by <b>40%</b> through WCAG-compliant high-contrast design, adaptive navigation, and simplified interaction depth.</li><li>Automated <b>30+ daily production updates</b> via an encrypted messaging layer, eliminating all manual release overhead.</li></ul>	

## PROJECTS

<b>CAI: Chartered Accountant Intelligence</b> — <i>Python, FastAPI, React, Groq, LangChain, LangGraph</i> [GitHub] Jun 2026	
<ul style="list-style-type: none"><li>Architected a <b>6-agent AI tax advisory system</b> (Orchestrator, Advisory, Document, Notice, YoY, Anomaly) with a decoupled LLM reasoning layer and <b>Vectorize Hindsight</b> persistent vector store — eliminating cross-session context loss with <b>zero-hallucination guardrails</b> via strict prompt constraints; full <b>LangSmith</b> tracing across the pipeline.</li><li>Engineered a <b>multi-namespace RAG retrieval system</b> using hierarchical <code>client:{id}:{ns}</code> key schemas across 5 semantic stores (tax_history, income, deductions, notices, preferences) with assessment-year-aware vector filtering, Form 16 PDF ingestion, and YoY delta / anomaly detection via Qwen-32B.</li><li>Implemented <b>production resilience</b>: exponential-backoff retry logic (3 retries, 2<sup>n</sup>s delays) on Groq API calls and concurrent <code>arecall()</code> async retrievals — achieving <b>sub-300ms</b> average latency across all vector namespaces.</li></ul>	
<b>PullSmith</b> — <i>Python, FastAPI, LangChain, Groq, Gemini, GitHub API</i> [GitHub] May 2026	
<ul style="list-style-type: none"><li>Architected an autonomous <b>7-agent PR review pipeline</b> — code review, security scanning, test generation, and merge/reject decisions via GitHub webhooks — <b>2nd place, Scalar Hackathon</b> (200+ teams).</li><li>Built a <b>self-healing CI loop</b>: auto-patches failing code via GitHub API, retries execution, and escalates structured bug reports only on repeated failure — reducing manual intervention by <b>100%</b>.</li><li>Implemented <b>multi-model LLM fallbacks</b> (Groq + Gemini), deterministic decision validation, and SSE-based live streaming for real-time review progress — shipped end-to-end in <b>24 hours</b>.</li></ul>	
<b>Vaultless</b> — <i>React, Solana/Anchor, Rust, TypeScript, React Native</i> [Live] [GitHub] Mar 2026	
<ul style="list-style-type: none"><li>Built a <b>passwordless biometric authentication</b> system on Solana Devnet using <b>Fuzzy Extractors</b>, reconstructing deterministic Ed25519 signing keys entirely in-memory — zero secrets stored on-disk or on-chain.</li><li>Engineered a <b>64-dimensional behavioural biometric engine</b> (keystroke, pointer, accelerometer, gyroscope) with Z-score normalization and weighted cosine similarity for sub-100ms real-time identity verification.</li><li>Implemented a <b>Ghost Wallet duress protocol</b> — detects coercion via typing-stress analysis, silently redirects to a decoy wallet, and emits on-chain <code>DuressEvent</code> alerts via Anchor events and EmailJS.</li></ul>	

## SKILLS

**Languages & Frameworks:** Python, TypeScript, JavaScript, Rust, SQL, Solidity, React, Next.js, Node.js, FastAPI, Vite, Tailwind CSS, HTML/CSS

**AI & LLMs:** LangChain, LangGraph, Multi-Agent Systems, RAG, Prompt Engineering, Vector Search, FAISS, Groq, OpenAI, Gemini, LangSmith, Agentic Workflows

**Core CS Skills:** Data Structures & Algorithms, Object-Oriented Programming, Operating Systems, DBMS, Computer Networks, System Design, Software Engineering, Machine Learning, Discrete Mathematics

**Databases:** PostgreSQL, MongoDB

**Tools & Platforms:** Docker, Git, GitHub Actions, CI/CD, Firebase, Cloudflare, Vercel, Linux, Postman

**Blockchain & Web3:** Solana, Anchor Framework, Smart Contracts, DeFi, Ethers.js, Web3.js, DIDs