

# PRAMOD KUMAR PANDA

Technical Lead | Software Engineer - Backend, APIs, Cloud, Data, GenAI

India (IST) | pramod5551@gmail.com

LinkedIn: linkedin.com/in/pramod-kumar-panda | Web: sharpbyte.dev/about

## PROFESSIONAL SUMMARY

---

Technical Lead with 13+ years building production backend systems across banking, insurance, and platform engineering. Hands-on delivery with Java and Spring through Java 21, AWS and Kafka microservices, containers and GitOps, and modern GenAI (RAG, LangChain, LangGraph, agentic workflows, FastAPI) integrated with enterprise security, observability, and quality practices. Experienced leading squads, shaping architecture, mentoring engineers, and shipping in regulated, integration-heavy environments.

## CORE COMPETENCIES

---

Languages: Java (8-21), Python, SQL

Frameworks: Spring Boot, Spring Cloud, Spring Security, FastAPI, Apache Camel

Cloud & infrastructure: AWS (EC2, IAM, managed data services), Docker, Kubernetes, OpenShift, Helm

Data & messaging: MongoDB, PostgreSQL, RDS, Kafka, JDBC, vector search / RAG

AI & ML engineering: GenAI, LLM integration, RAG, embeddings, LangChain, LangGraph, agentic AI, tool use, prompt engineering, structured JSON outputs

APIs & security: REST, OAuth2, TLS, contract-first APIs, integration patterns

Quality & operations: JUnit 5, Mockito, TDD, CI/CD (Jenkins, Bitbucket, GitHub Actions), Datadog, Splunk, Agile / Scrum

## PROFESSIONAL EXPERIENCE

---

### OptivaTek India - Technical Lead Apr 2022 - Present

- Led technical design and delivery for an internal AI assistant: plain-language answers on credit policies, KYC, exceptions, and case updates grounded in approved documents, with retrieval-time access control and audit-friendly flows.
- Implemented production GenAI stack: RAG over policy libraries (vector store, chunking, re-ingest jobs), LangChain pipelines, LangGraph state machines for branching, retries, timeouts, and human-in-the-loop on high-risk paths.
- Built agent-style tool use against allow-listed APIs with strict step caps; separated read-only automation from human-approved write actions.
- Delivered Python/FastAPI orchestration services (chat, retrieval, model calls, streaming) alongside existing Java services; shared auth, logging, and operational patterns with the wider platform.
- Technical lead for core customer and account transaction services: postings, balances, limits, and channel-facing APIs on Java 21 and Spring Boot 3.5, MongoDB, Kafka on AWS; clear domain boundaries and repository abstractions for tuning and scale-out.
- Owned containers and release engineering toward zero-downtime: Docker, Kubernetes/OpenShift, Helm; Jenkins and Bitbucket-based pipelines with gated promotion.
- Drove observability and incident readiness (tracing, dashboards, log analytics); championed JUnit/Mockito/TDD, reviews, pairing, and mentoring within Scrum teams.

### Wipro - Senior Software Engineer Feb 2016 - Mar 2022 | India & UK

- Senior engineer on a long-running pensions and annuities programme: member and scheme data, benefit quotes, accumulators, payout schedules, and integrations into policy administration and finance systems.
- Built and operated Java/Spring Boot and Spring Cloud microservices on AWS; Apache Camel and batch jobs for enterprise integrations (REST, batch).
- Hardened APIs with OAuth2, Spring Security, and TLS; focused on data integrity across integration boundaries.
- Split delivery between India and UK squads; contributed through automated tests, code review, predictable releases, and mentoring.

**Tata Consultancy Services (TCS) - Developer Jan 2013 - Feb 2016**

- Developed services for policy servicing, renewals, and claims-adjacent workflows; maintained batch jobs aligning rating and finance extracts with production data.
- Implemented Java and Spring Boot services with REST contracts; improved behaviour through unit tests and SQL performance tuning.
- Delivered within Agile release trains with BA, QA, and operations partners; participated in incident handling and root-cause analysis.

**EDUCATION**

---

**B.Tech, Computer Science and Engineering**

Gandhi Institute of Engineering and Technology, Odisha | 2012