KAPIL HADOLTIKAR

Software Engineer (Backend) | Java 21 & Distributed Systems | Cloud-Native Specialist | Immediate Joiner

⚲ Bengaluru, India | ✉ kapilh.cdac@gmail.com | 📞 +91 7888155779 | 💼 [Portfolio](#) | 🔗 [LinkedIn](#) | 💻 [GitHub](#)

Backend Software Engineer with a deep focus on **Distributed Systems** and **High-Concurrency Java Architectures**. Proven ability to implement production-grade patterns including **Event Sourcing**, **PCI-DSS compliant vaulting**, and **AI-driven fraud detection**. Passionate about optimizing cloud infrastructure costs and building resilient, low-latency microservices using the latest **Java 21 (Virtual Threads)** and **GraalVM** ecosystems.

TECHNICAL SKILLS

Languages	Java 17/21 (Advanced), SQL, Python (for ML integration)
Backend Frameworks	Spring Boot 3.x, Spring Cloud, Hibernate/JPA
Distributed Systems	Apache Kafka, RabbitMQ, Event Sourcing, Microservices
Databases & Scaling	PostgreSQL, Redis, Read/Write Splitting, AOP Routing
DevOps & Cloud	GraalVM Native Image, Docker, Kubernetes (K8s), ONNX Runtime
Security & Patterns	PCI-DSS Level 1 Patterns, AES-256-GCM, Tokenization, OAuth2

SOFTWARE DEVELOPMENT PROJECTS

Production-Grade Distributed Payment Engine | [GitHub](#) | *Nov 2025 – Present*

- **Hybrid Runtime Strategy:** Architected a dual-runtime environment using **GraalVM Native Image** for the Control Plane (achieving **0.4s cold starts**) and standard JVM for the Data Plane; optimized pod density to benchmark a **38% reduction** in cloud infrastructure costs.

- **High-Concurrency Fraud Engine:** Integrated an **XGBoost model** via ONNX runtime using a **Champion-Challenger** (Dual-Inference) strategy. Leveraged **Java 21 Virtual Threads** for non-blocking feature engineering, maintaining **P95 latency <50ms** under high-concurrency load.

- **PCI-DSS Compliant Vaulting:** Designed a secure Vault Service utilizing **AES-256-GCM encryption** and field-level tokenization to isolate sensitive cardholder data, adhering to Level 1 security patterns.

- **Event-Driven Resiliency:** Implemented **Event Sourcing** with **Apache Kafka** and webhook delivery via **RabbitMQ** with exponential backoff and **Dead Letter Queues (DLQ)**, ensuring 99.99% transactional consistency.

- **Database Scaling:** Engineered **AOP-based Data Source routing** to dynamically distribute traffic between Primary (Writes) and Secondary (Reads) PostgreSQL instances, increasing read throughput by **40%**.

Accent (System Automation Tool) | [GitHub](#) | Oct *2025 - Present*

- **OS-Level Integration:** Developed a background utility bridging the **JavaFX/AWT** stack with Windows system-level theme settings for seamless UI synchronization.

- **Efficiency:** Developed a zero-dependency **>65MB native executable** using **jlink/jpackage**, reducing the memory footprint by **65%**.

EDUCATION

Post Graduate Diploma in Advanced Computing (PG-DAC) *Center for Development of Advanced Computing (C-DAC), Hyderabad* | 60% | Feb 2024

- *Coursework:* Advanced Java, Microservices, Cloud Computing, Database Technologies.

Bachelor of Engineering - Mechanical Engineering *M. S. Bidve Engineering College, Latur* | 77% | May 2021

- Developed strong analytical problem-solving skills and experience with complex system modeling.