

KIRAN U KAMATH

✉ kirankamat.mgm@gmail.com — ☎ +91-9972925056 — in [linkedin.com/in/kiranukamath](https://www.linkedin.com/in/kiranukamath)

Experience

- **PayU** Bengaluru, IN
Senior Software Engineer Apr 2023 – Present
 - **System Re-Architecture:** Spearheaded the migration of the Trident FRM system from a monolithic Java-based application to a scalable, multi-tenant microservices-based architecture leveraging Spring Boot, RabbitMQ, and Couchbase. Delivered significant cost reductions and performance improvements.
 - **Rule Engine Development:** Designed and implemented a rule engine capable of processing 5x the transaction volume of the previous version, supporting dynamic rule authoring and real-time execution without redeployment.
 - **Real-Time Statistics Update:** Developed an optimized realtime statistics computation model for rule evaluation using Couchbase as an in-memory database to ensure low-latency operations for data fetch and storage
 - **Generic Workflow Automation:** Designed and implemented workflows for diverse use cases, including fraud detection and anti-money laundering (AML), leveraging Camunda BPMN for multi-level approvals and process orchestration.
 - **Performance Optimization:** Reduced decision engine latency from 630ms to 50ms using Java Profiler, memory leak analysis, and targeted optimizations. Scaled throughput from 40 TPS to 200 TPS per node (4-core, 8GB RAM VM).
 - **Feature Development:** Implemented key features, including case management workflows, real-time currency conversion, suspicious entity detection, and entity profile enrichment.
 - **Engineering Excellence:** Focused on code reviews, enforcing code quality standards, SOLID principles, and design patterns. Advocated for an API-first approach in API design, integration, and development.
- **PayU** Bengaluru, IN
Software Engineer Apr 2021 – Apr 2023
 - **Reporting Service:** Delivered a fully customized reporting service powered by Couchbase Analytics, reducing TAT from hours to minutes while offloading operational database load and supporting ad-hoc query execution
 - **Rule Engine - Case Manager:** Contributed to the development of FRM Trident 2.0, enhancing rule engine capabilities and building the case manager portal for fraud monitoring
 - **DBInsert Microservice:** Designed and implemented a robust DBInsert Microservice using RabbitMQ, Kafka, MySQL, and Couchbase to ensure seamless data transformation and integration between messaging systems and databases
 - **Data Migration Utility:** Built a migration utility to transfer data from Couchbase to MySQL using Kafka and Maxwell's Change Data Capture, improving data consistency and scalability
- **PayU** Bengaluru, IN
Associate Software Engineer Sep 2020 – Apr 2021
 - Worked on ML model development for RBA Scorecard, Fraud ML models, including hypothesis testing, feature engineering, and hyperparameter tuning.
 - Integrated ML models into the FRM Rule Engine.
 - Contributed to feature development, bug fixes, and production issue resolution.

Summary

Software Engineer with over 4.5 years of experience in architecting, designing, developing, and optimizing high-performance, scalable applications.

Education

- **Bachelor of Engineering – Information Science and Engineering** GPA: 8.24
National Institute of Engineering 2016 – 2020
- **Cloud Native Application Architecture Certificate**
Udacity 2023
- **Data Scientist Nanodegree** Certificate
Udacity 2021

Skills

- **Programming Languages:** Java , Python , Go (beginner)
- **Frameworks and Tools:** Spring Boot, Hibernate, Camunda BPMN, REST API Development, Java Profilers
- **Databases and Caching:** Couchbase (NoSQL), MySQL, Redis (Lua scripting), Elasticsearch, Ehcache
- **Messaging and Streaming:** RabbitMQ, Apache Kafka
- **DevOps and Cloud:** Docker, Kubernetes (basic), AWS (EC2)
- **Software Engineering Practices:** API-first design, SOLID principles, Design patterns, Code reviews

Achievements

- Reduced real-time FRM decision p99 latency from 630ms to 50ms.
- Scaled throughput from 40 TPS to 200 TPS per node (4-core, 8GB RAM VM)