Aman Kumar

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Education

Indian Institute of Technology, BHU (Varanasi) — Varanasi, India
Bachelor of Technology in Mechanical Engineering | ***GPA: 9.1/10*** — *Aug 2019 – Apr 2023*

Experience

Software Development Engineer 2 — Feb 2026 – Present
Tamara — *Remote, India*

- Migrated consumer screening for **20M+ customers** to a redesigned platform supporting **product-specific risk policies** and risk-tier-based decisions, using **feature-gated dual-system routing** for safe progressive rollout.
- Eliminated synchronous screening bottlenecks across **4 product teams** by re-architecting webhooks into a **resilient RabbitMQ-based asynchronous pipeline** with **configuration-driven callbacks**.
- Removed single-provider lock-in on the fraud/AML validation platform by architecting **multi-provider flows** behind a unified API, with **flow-specific PostgreSQL partitioning** and **auditable decision history**.

Software Development Engineer 2 — Oct 2024 – Jan 2026
Dream11 — *Mumbai, India*

- Service owner of the **multi-tenant Offers Platform**, architecting offer logic abstraction to reduce go-live effort from **60 to 15 man-days**. Maintained 99.99%+ uptime during IPL/World Cup seasons serving **6.5M+ RPM at 12ms p99 latency** using **Vert.x, DynamoDB, and Kafka**.
- Demonstrated **60% lower normalized infrastructure cost** at equivalent traffic scale by leading **DynamoDB schema and partition strategy design**, evaluated against Aerospike via cost-performance analysis, while maintaining low latency and efficient queries.
- Improved system throughput by **40%** through **Gatling-based load testing (Torque)**, scaling validation from single-instance benchmarks to **35M RPM** while simulating real-time match flow.
- Pioneered Dream11's first in-depth **DynamoDB observability dashboard and alerting system** in Datadog, reducing false alerts by **20%** and incident resolution time by **40%** through refined thresholds and actionable metrics.

Software Development Engineer 1 — Jun 2023 – Sep 2024
FPL Technologies (OneCard) — *Pune, India*

- Reduced implementation effort by **40%** for off-network financial operations (fees, interest, EMI, etc.) via a configurable **transaction posting engine** based on **double-entry accounting** across multi-account transactions.
- Developed a CSV-driven **ISO-8583 testing framework** (Java, JPOS) with configurable transaction generation for **VISA and MasterCard** networks (MCC, forex, merchant), strengthening developer testing of transaction-posting flows and expanding **UAT coverage**.
- Architected **card tokenization for merchant payments** using factory and strategy patterns (Juspay), enabling users to save OneCard cards on merchant apps via OTP verification with plug-and-play PG integration.

SWE Intern — May 2022 – Jul 2022
Microsoft Inc. — *Hyderabad, India*

- Engineered real-time collaborative notebook editing in **Microsoft OneNote** for Android using **Java, Kotlin, and C++**, integrating ODSP services to enable Google Docs-like functionality.

Technical Skills

Languages:	Java, SQL, JavaScript, Python, C/C++
Backend & Distributed Systems:	Vert.x, RxJava, Kafka, RabbitMQ, SQS, Spark, JPOS
Databases:	DynamoDB, PostgreSQL, MySQL, Aerospike
Frontend:	React.js, Redux
Cloud, Infra & Observability:	AWS, Docker, Kubernetes, Datadog, New Relic

Achievements

- **Knight on LeetCode (2050+)** and **4-Star on CodeChef (1940+)**; achieved **Global Rank 89 / AIR 10** among 17,000+ participants in LeetCode Biweekly Contest 93.
- Achieved **Global Rank 280** in Reply Code Challenge 2022.