Rohan Deshpande Principal Engineer

Seattle, WA · rohan.deshpande@gmail.com · +1 206-555-0158 · linkedin.com/in/rohandeshpande

PROFILE SUMMARY

- **Principal Engineer** with **17 years** in **payments and large-scale storage systems**, setting technical direction for checkout payment services at Amazon across 14 teams in 3 organizations.
- Works in **Java** and Rust on **AWS** (Amazon DynamoDB, SQS, Lambda, ECS), with Aurora PostgreSQL for ledgers, Amazon Kinesis for payment events and CloudWatch for monitoring.
- Strongest in **multi-year technical strategy**, **correctness for money-moving systems** and **org-wide data migrations**, using written narratives, tenets and correction-of-error reviews to make decisions hold across teams.
- Partners with 2 directors, 9 engineering managers and the payments product leads on the 3-year plan, and reviews designs for other payment orgs through the principal engineering community.
- Chairs the weekly payments operational review, mentors 6 senior and principal-track engineers and sponsors promotion cases to Principal.

TECHNICAL SKILLS

Languages:	Java, Rust, Python, C++, SQL
Distributed Systems & Design:	System Design, Idempotency, Double-Entry Ledgers, Event-Driven Architecture, Multi-Region
Cloud & Infrastructure:	AWS (Lambda, ECS, SQS), AWS CDK, Docker
Data & Messaging:	Amazon DynamoDB, Amazon Aurora PostgreSQL, Amazon Kinesis, Redis
Reliability & Observability:	SLOs, Correction of Error Reviews, Amazon CloudWatch, AWS X-Ray, Load Testing
Build, CI & Developer Tooling:	AWS CodePipeline, Fault Injection Testing, Feature Flags
Technical Leadership:	Technical Strategy, Written Narratives, Design Reviews, Build vs Buy, Promotion Sponsorship

EDUCATION

Indian Institute of Technology Bombay — **B.Tech. in Computer Science and Engineering** — Mumbai, India · Jul 2005 to May 2009

WORK EXPERIENCE

Amazon — **Principal Engineer, Payments** — Seattle, WA · Aug 2016 to Present

- Wrote the 3-year technical strategy for checkout payments that 14 teams in 3 organizations adopted, folding 5 separate card authorization paths into **1 idempotent service** by 2025.
- Designed a double-entry payments ledger on Aurora PostgreSQL and Amazon DynamoDB, reviewed with 3 principal engineers and finance, cutting daily reconciliation breaks from about 1,200 to **under 40**.
- Led the move of **62 services** off a shared Oracle payments database onto stores each team owns, using dual writes and reversible cutovers, with no Sev-1 incident during the switch.
- Built the retry and idempotency layer for card authorizations in Java and tuned it in peak-event load tests, holding p99 latency at **310 ms** under 4 times normal traffic.
- Made the case with 2 directors and 9 engineering managers to fund ledger and fraud platform work in the 3-year plan, which cut payment-related customer contacts by **27%**.

Microsoft — **Software Engineer to Senior Software Engineer, Azure Storage** — Redmond, WA · Jul 2009 to Jul 2016

- Built a fault-injection library for the blob storage front end and made it part of every team's release checklist, catching **40+** failover bugs before release in its first year.
- Redesigned metadata caching in C++ for the blob front end, cutting p99 read latency for small blobs from 48 ms to **19 ms**.
- Mentored 6 engineers as tech lead of the blob front-end team, and **4 of them** were promoted to Senior Software Engineer.