Mohammed Aman Khan

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Summary

Backend engineer (SDE II, Juspay) with 5+ years building production systems for payments, SaaS and real-time products, owning services from system design to Kubernetes rollout. Shipped Hyperswitch's IC++ cost observability platform with an agentic RAG assistant (up to 10% lower card processing costs) and builds config-driven Rust clearing and settlement systems for Visa, Mastercard and RuPay.

Skills

Languages	Python, Rust, TypeScript, JavaScript, SQL, Bash
Backend & Data	FastAPI, Tokio, Node.js, Express, GraphQL, REST, PostgreSQL, DynamoDB, Redis, Kafka, Vespa
Cloud & DevOps	AWS (EKS, Lambda, API Gateway, AppSync, Cognito, S3), Kubernetes, Helm, Docker, GitLab CI/CD
Observability	Prometheus, Grafana, Loki, Kibana
AI / LLM	RAG, Agentic Orchestration, Tool Calling, Embeddings, Azure OpenAI, Gemini, Prompt Engineering
Architecture	Distributed Systems, Microservices, Event-Driven Systems, Payments (IC++, Clearing & Settlement)

Experience

Juspay Bengaluru
Software Development Engineer II *Nov 2024 – Present*

Hyperswitch Cost Observability: self-serve cost analytics for merchants on Interchange++ (IC++) pricing

- Designed and shipped the platform end to end: per-network fee breakdowns, drift detection and margin tuning.
- Owned the design of an AI-powered anomaly scoring service over live card-payment streams with root-cause hints, cutting card processing costs by up to 10% quarter over quarter.
- Extended payment microservices on AWS EKS for high concurrency with safer rollouts and failure isolation, serving thousands of users at 99.9% uptime.
- Developed the platform's agentic AI assistant: multi-step LLM orchestration with Vespa-backed RAG, OpenAPI-bound tools and per-user, per-tenant authorization.

Base2 Clearing & Settlement: config-driven Rust system for network and acquirer clearing and settlement files

- Implemented JSON/YAML-driven file generation, parsing and fee logic for 3 networks: Visa, Mastercard, RuPay.
- Added logging, dashboards and alerting for the file pipelines with Kibana, Loki, Grafana and Prometheus.

Softway Bengaluru
Software Engineer II *Aug 2022 – Nov 2024*

Culture+ Suite: serverless SaaS for culture surveys, analytics and CRM (AWS Lambda, DynamoDB)

- Led end-to-end engineering of Culture+ Counter; cut median submission latency by 30% by moving aggregation to DynamoDB-triggered async workers.
- Owned architecture and delivery of the Culture+ Admin CRM to production, supporting 20% revenue growth.
- Introduced AWS AppSync (GraphQL) over the Lambda/DynamoDB data plane; cut manual deployment steps by 70%.
- Hardened auth with AWS Cognito and user-scoped DynamoDB access, added SSO and streamlined the login path, cutting median login time by 55%.

Baliza Remote
Software Engineer *Aug 2021 – May 2022*

- Delivered cross-platform live streaming and video calling for Velor, a baby-monitor app (Flutter, ConnectyCube).
- Specified compact control messages over Firebase Realtime Database, reducing action-request latency by 90%.

Projects

Video Streaming Platform: Rust, Tokio, Kafka, PostgreSQL, Redis, MinIO (S3), FFmpeg, Helm

- Architected an event-driven VOD pipeline: multipart S3 uploads, Kafka events, Rust workers producing 360p–1080p HLS.
- Parallelised transcoding into 60-second chunk jobs claimed via PostgreSQL SKIP LOCKED, with duplicate-event suppression and crash recovery.

Job Application Automation: Python, FastAPI, Playwright, PostgreSQL, React, Claude and Ollama LLMs

- Built a local-first pipeline: discovery from 4 sources, fit gating, validated LLM resume tailoring and Playwright form filling.
- Engineered a plugin architecture with an LLM gateway tracking tokens and cost per call; 500+ automated tests.

Education & Achievements

BITS Pilani, *Master's in Artificial Intelligence & Machine Learning* *Apr 2026 – Present*

CMR Institute of Technology, *Bachelor of Engineering in Computer Science* *Jul 2018 – Jul 2022*

LeetCode: 500+ problems solved (290+ medium, 25+ hard).