
Kaushik R Banger

Senior Backend Engineer | Distributed Systems | Real-Time System | AWS

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[Portfolio](#) | [GitHub](#) | [LinkedIn](#)

SUMMARY

Senior backend engineer with **4.5+ years** of experience building **high-scale, real-time** gaming systems and **cloud-native** infrastructure on **AWS**. Proven in scaling production traffic to **~600K requests/min**, designing fault-tolerant event pipelines, improving payments correctness, and driving reliability through **strong observability and incident ownership**. Strong in **system design, performance optimization**, and **execution leadership** in fast-paced environments.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, SQL, Go

Backend: Node.js, REST APIs, WebSockets, gRPC, Microservices, Distributed Systems, System Design, Event-driven Systems, ETL

Databases: PostgreSQL (RDS/Aurora), MySQL (Aurora), ClickHouse, MongoDB, Redis

AWS: Lambda, EC2, EKS, S3, API Gateway, Kinesis, Firehose, Step Functions, Glue, Athena, SQS, Cognito, CloudWatch, Amazon Personalize

DevOps & Tools: Docker, Kubernetes, Terraform(IaC), NGINX, Git, Airflow, CI/CD, Percona Monitoring, Tailscale

EXPERIENCE

Jumbo — New Delhi - Founding Engineer (Senior Backend Engineer)

Aug 2024 – Present

- Scaled the gaming platform to **~600,000 requests/min**, reliably handling **₹5 Cr peak payment** throughput and **30 Cr+ in-game transaction** volume
- Rewrote the **core transaction service in Go + gRPC**, reducing latency to single-digit ms while ensuring financial correctness through **atomicity, idempotency, running balances**, and integer-based currency normalization to **eliminate float drift**; also built reliable **user-attribute fanout pipelines** for analytics/event platforms using **TDD and spec-driven development** with AI-assisted validation.
- Owned the end-to-end **system architecture** for the in-house fantasy platform, defining **service boundaries, database schema, and API contracts** for scalable delivery.
- **Reduced backend load by ~50%** by moving low-change/high-read APIs **behind CDN**, implementing correct **cache-control** and invalidation strategy.
- Delivered an async **recharge + KYC orchestration layer** using a vendor-agnostic **Adapter Pattern**, reducing third-party dependency cost by **~70%** through caching and retries.
- Developed real-time infrastructure including **Redis + ClickHouse event aggregation/distribution** and a scalable **WebSocket platform (API Gateway + Redis)** for connection state, channel broadcasts, and WebSocket-based API calls.
- Built centralized **logging + trace correlation** (ClickHouse + Redis) using **Node.js async_hooks**, reducing MTTR and surfacing performance bottlenecks across services.

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- Improved **tail latency** and peak resilience through **API + DB bottleneck** analysis and **load testing** using **Locust, Percona, and ClickHouse**.
 - Modernized AWS infrastructure and security using **AWS Organizations, CI/CD pipelines, and IAM Identity Center RBAC**, securing internal access via **Tailscale** and enforcing least-privilege operations.
 - Strengthened system integrity with **OTP abuse prevention** and **multi-device concurrency conflict handling** for account safety and reliability.
 - Served as the **primary escalation owner** for production incidents, leading debugging, **incident resolution**, and release execution while unblocking the team.
 - Built an **Aviator game** from scratch and scaled it to **~1,000 CCU**, improving engagement through stable gameplay loops and production hardening.
 - Improved engineering velocity by using **AI-assisted tooling** and **MCP database workflows** for faster debugging, system insights, and architecture validation.

Juego Studios — Mangalore - Software Engineer (Backend / Cloud)

Aug 2021 – Jan 2024

- Built a resilient AWS ingestion platform using **Kinesis**, reducing projected infrastructure cost by **~66%** while improving throughput and reliability.
- Delivered end-to-end analytics pipelines using **AWS Glue ETL + Glue Catalog + Athena**, reducing query latency from **~7s → 1–2s** and enabling structured datasets.
- Improved database scalability using **Aurora MySQL tuning, SQL transactions, indexing, and Redis caching**, achieving **~1,000 CCU and 1,000 RPS**.
- Provisioned and maintained cloud infrastructure using **Terraform (IaC)**, enabling reproducible deployments and consistent environments.
- Deployed and managed **multiplayer game** servers on **Kubernetes**, integrating **Agones** as a PoC for dedicated server scaling.
- Implemented secure authentication including **M2M architecture** and **JWT access/refresh token flows** for service-to-service and client auth.
- Built internal cost-optimization tooling including **Lambda memory benchmarking** and replacing **NAT Gateway with EC2 NAT**, reducing recurring AWS cost.
- Integrated secure wallet authentication flows using **Metamask** and **Keplr** for Web3 gaming features.
- Mentored engineers and collaborated across gameplay, frontend, CMS, and game design teams.

EDUCATION

Srinivas Institute of Technology, Mangalore

B.E. Computer Science Engineering (2021)

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