Jayant Khandebharad

+91 7517678382 • jntkhandebharad@gmail.com • linkedin.com/in/khandebharad • github.com/Jayantkhandebharad • Pune, India

SUMMARY

Software Development Engineer with 3+ years building and operating **distributed, event-driven backend systems** for a multi-tenant, customer-facing SaaS on Python, FastAPI, Azure, and SQL/NoSQL. Ship production services with idempotent retries, state-machine workflows, and row-level concurrency control to keep customer-visible latency and data correctness at a high bar. Own features end-to-end across design, code reviews, CI/CD, testing, and on-call operations; dive deep into production telemetry to drive architecture and business decisions.

WORK EXPERIENCE

CloudLex — Senior Software Engineer *Jan 2023 – Present*

Legal-tech SaaS platform for personal-injury law firms (multi-tenant, Azure, Python).

- **Per-tenant cost attribution & accounting ledger:** Own a financial-grade cost-attribution pipeline tracking spend per-tenant and per-request across 4 cost centers; per-request telemetry is staged through Redis (payload in cache, only UUID on the queue) to sidestep the 64 KB queue limit while preserving at-least-once semantics, and the Cosmos DB ledger drives internal billing/unit-economics decisions that previously required manual CSV exports.
- **Event-driven integration at scale:** Built a **CDC / outbox-style sync pipeline** on Azure Storage Queues + Azure Functions with dynamic concurrency, 5-attempt retry, and automatic poison-queue dead-lettering; decoupled partner webhook ingest from a multi-minute downstream indexing pipeline over **10K+** documents, keeping producer-side API p99 under **100 ms** even during backlog bursts.
- **Concurrency & data correctness:** Eliminated duplicate-write deadlocks on a high-throughput API by combining a named **MySQL advisory lock** (`GET_LOCK`), atomic `INSERT ... ON DUPLICATE KEY UPDATE`, and a 3-attempt backoff scoped to error codes `1205/1213/1040`; stabilized writes between the API and a sibling batch job.
- **Distributed workers at scale:** Designed a horizontally-scalable document-processing service using PostgreSQL `SELECT FOR UPDATE SKIP LOCKED` as a native work queue, enabling N concurrent replicas to drain the queue in parallel with zero external lock manager and no double-processing.
- **State machines & idempotency:** Implemented a three-phase document state machine (claim→submit→analyze) with retry counters in a JSONB column and an early-lock-release pattern that keeps long-running external calls outside row-lock windows — safe under replay and at-least-once delivery.
- **Customer-facing voice service — zero silent loss:** Architected a multi-tenant PSTN-connected Azure Functions app (Event Grid + HTTP + Timer triggers) on Azure Communication Services; stateless workers keyed on ACS `correlationId` with Redis-externalized per-call context, and a TTL-windowed fallback sweeper re-processes orphaned sessions when disconnect webhooks never fire — **400+** calls/month with zero silent loss.
- **End-to-end API ownership:** Own design, delivery, and operations of a multi-tenant FastAPI service across multiple product surfaces; HS512-JWT middleware validates `fid/uid` claims against query and body IDs to block cross-tenant access at the edge, and typed error codes drive alerting instead of log-string matching.
- **Observability & operational excellence:** Authored `lexee_logging` (correlation-ID propagation FastAPI→Queue→worker, ContextVar scopes, Azure Monitor export, error-code registry — any prod error locatable in Log Analytics with one KQL query); own a parameterized multi-stage Azure DevOps pipeline to Container Apps / Jobs / Functions with dual-tag images and one-command revision rollback — shipping multiple times/day at **99.9%** uptime and **~22%** lower cloud cost.

Eaton — Software Development Engineer Intern *Jun 2022 – Jul 2022*

- Delivered 4+ customer-management and access-control screens in Angular 8 to enterprise coding standards; profiled and optimized grid rendering with Chrome DevTools Timeline.

TECHNICAL SKILLS

Languages: Python, C++, SQL, Bash

Distributed Systems & Backend: REST API design, event-driven architecture, message queues, CDC/outbox pattern, state machines, idempotency, retry with exponential backoff, dead-letter queues, circuit breakers, row-level locking (`SELECT FOR UPDATE SKIP LOCKED`), advisory locks, optimistic/pessimistic concurrency, horizontal scaling, multi-tenant isolation, correlation-ID tracing

Frameworks: FastAPI, Starlette, SQLAlchemy, Pydantic, LangGraph, LangChain, Uvicorn, Flask

Databases & Storage: PostgreSQL, MySQL, Cosmos DB (NoSQL), Redis, Azure Blob Storage, Azure Queue Storage, Azure AI Search (vector + hybrid + semantic)

Cloud & DevOps: Azure Container Apps, Container App Jobs, Functions, Communication Services, Key Vault, DevOps Pipelines (multi-stage YAML), Docker, CI/CD, managed identity, Application Insights, Log Analytics, KQL, OpenTelemetry

AI / LLM Engineering: RAG, vector search & embeddings, LangGraph orchestration, tool calling, prompt engineering, LLM provider abstraction (Azure OpenAI, Anthropic, Groq, Gemini), LLM evaluation & guardrails

CS Fundamentals: Data Structures & Algorithms, System Design, OOP, Design Patterns (Strategy, Dispatch Table, Worker, Singleton, Middleware), Operating Systems, DBMS, Networks

EDUCATION

B.E., Computer Science — Pune Institute of Computer Technology (PICT), Pune | CGPA: **9.08 / 10** Jul 2019 – Jul 2023

ACHIEVEMENTS

620+ LeetCode problems • **Smart India Hackathon 2022** National Finalist • **MHT-CET 99.71 percentile** (top 1% of ~300,000) • NSS PICT Chapter Head (2021–2023), led 20+ community events.