Ashish Yadav

Full-Stack Engineer · Go, React & Distributed Systems
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PROFESSIONAL SUMMARY

Backend-focused full-stack engineer (Go, AWS, React). Built a 50+ domain serverless platform and a chat backend for an app with 100K+ downloads at sub-200ms latency; cut AI inference cost ~80% and repeat BigQuery queries ~95%.

EDUCATION

K.R. Mangalam University — B.Tech in Computer Science and Engineering *Aug 2023 – Jun 2027 (Expected)*
Coursework: Data Structures, Algorithms, OOD, DBMS, Operating Systems, Computer Networks, Complexity Analysis

EXPERIENCE

Software Developer Intern, ASOasis Tech *Aug 2025 – Present · Remote*

- Architected a serverless Go backend on AWS Lambda covering 50+ product domains, using single-table-per-domain DynamoDB with a zero-Scan read policy and 15+ shared rate limiters.
- Shipped the real-time chat backend for a consumer app with 100K+ downloads, responding in under 200ms; paired a Gorse recommendation engine (Redis + MySQL) with a match model over 5 engagement signals.
- Raised patch success in a VS Code AI diff pipeline from 40% to 100% and cut inference cost ~80% using four-tier fallback matching (exact, normalized, fuzzy-anchor, line-number).
- Designed an approval gate for AI agent actions on AWS Step Functions (**waitForTaskToken**): risky steps pause at zero compute cost and run only after approval; a **transactional outbox** and optimistic locking keep Postgres state consistent.
- Wrote 6+ AI features (mock interviews, resume tailoring, promotion packets) where every claim must cite a server-verified source; guards block unsupported output before it is saved.
- Built a fault-injection test framework with 14 invariant checks over event logs; it caught 15/15 seeded bugs (7 held out) with 0 false alarms across 45,102 checks.
- Implemented a staged rollout service in Go (Internal → 1% → 5% → 100%) on Firebase Remote Config that rolls back automatically when telemetry drops (e.g. purchase success below 95%), with live status over SSE.
- Delivered a multi-tenant workflow platform (EventBridge scheduler, 2–8 concurrent workers) and a BigQuery analytics backend; a 5-minute TTL cache cut repeat queries ~95%.
- Hardened security: SSRF protection, no-egress sandbox, PII-minimized logs, GDPR export/erasure; traced and fixed a live rate-limit bypass via a signed-header trust scheme.

Freelance Software Developer · Independent Contractor *Nov 2024 – Jul 2025 · Remote*

- Shipped Swipe It, a recruitment platform using vector embeddings that improved candidate-role match precision 80% over keyword search; deployed end to end for a startup.
- Developed an ERP backend with a configurable Formula Engine, reaching 100% stock-reconciliation accuracy and automating order-to-production via email parsing, cutting operational overhead 90%.

PROJECTS

Mini-Dropbox — Go · REST API · Distributed Systems · GitHub *Nov 2024*

- Engineered a distributed file store in Go with master-node coordination, MD5 content-addressed storage, deduplication, and a REST API for cross-node registration and retrieval.
- Raised throughput 4x (500→2,000 req/s) and cut memory 43% and retrieval time 55% with sync.Pool buffers and an in-memory existence cache; RWMutex keeps access safe across both storage nodes.

ASHOS — CLI Personal OS — Go, OpenAI, RAG, SQLite, Vector Search · GitHub *Sep 2024*

- Constructed an event-driven CLI in Go with dependency injection and interface-driven storage, so a full infrastructure swap takes 1 line; sync.RWMutex protects 6+ concurrent modules.
- Built a RAG engine from scratch: OpenAI embeddings, hybrid vector search (SQLite-vec + custom cosine similarity), and GPT synthesis across 4+ data sources, exposed as 4 productivity commands.

SKILLS

Languages: Go (net/http, Gin, GORM), Python, TypeScript, JavaScript (ES6+)
Backend & Cloud: AWS (Lambda, Step Functions, DynamoDB, S3, EventBridge, SQS, CloudWatch), GCP (BigQuery), Node.js
Frontend: React.js, Next.js, Tailwind CSS
Databases: DynamoDB, PostgreSQL, MySQL, MongoDB, Redis, SQLite
AI & Tools: OpenAI API, RAG, vector search, Git, Docker, GitHub Actions

ACHIEVEMENTS & OPEN SOURCE

- Open-source contributor to Appwrite, Keyshade, and Discord Ticket.
- Top 50 of 2,000+ candidates in HackerRank's Orchestrate hackathon.
- Certified in AWS Cloud Computing (Internshala) and Azure Functions (Microsoft Learn).