

Kailash Kumar

AI & Backend Engineer

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SUMMARY

AI & Backend Engineer (3+ yrs) who ships production agent systems, not demos. Built Adzump's AI core — a custom agent-as-tool orchestration framework, a LangGraph conversational engine, and ML forecasting on a multi-provider LLM stack (Claude, OpenAI, Gemini, DeepSeek) across Meta & Google Ads — plus the auth, scheduling, and 250+ API integration backend underneath.

EXPERIENCE

Modlix Nov 2022 – Present
NoCode SaaS Bengaluru

Tech Lead — Adzump-AI (AI Ad-Automation Platform) Oct 2025 – Present

- Architected a provider-agnostic, agent-as-tool orchestration framework (routing 9 tool groups with parallel execution and a tool-of-tools router) coordinating 3 specialized sub-agents — Product Analyst (competitor discovery), Vision Analyst (creative selection), Profile Writer — to auto-configure Meta & Google Ads campaigns.
- Engineered its multi-provider LLM layer (Claude, OpenAI o-series, DeepSeek) with prompt caching, Anthropic server-side web search/fetch, and automatic context-window management.
- Shipped a LangGraph + LangChain conversational campaign-setup engine — a 9-node state machine (data collection, budget prediction, account selection) streaming over SSE.
- Trained a LightGBM model forecasting ad performance (impressions, clicks, conversions) from keyword embeddings, plus a linear-regression budget model; added a pgvector RAG loop learning from accepted/rejected keywords and a weighted session-scoring loop grading each agent run.

Backend Engineer Nov 2022 – Sep 2025

- Built an HA-clustered job scheduler (Quartz, JDBC JobStore with DB-lock coordination) running recurring tasks and auto-updates across microservices without double-execution.
- Architected authentication & authorization (RBAC, SSO, OAuth 2.0 social login) for secure onboarding and access across multiple client applications.
- Owned the third-party integration layer — 250+ API endpoints across Meta Ads, Google Ads, WhatsApp, and Zoho — unifying ad, messaging, and CRM data with idempotency and retry/backoff.
- Designed a Redis-backed token & caching layer (eviction, expiry, fallback) and a lead-processing pipeline ingesting Google campaign data to auto-create adsets/ads.

KIRUN Framework Nov 2022 – Present

- Contributed to KIRUN, a JSON-based expression compiler for Java and TypeScript; enhanced the expression evaluator with array range operators, object key modification, indexing, and multi-algorithm hashing.

Smart-Asset [DCRM] Nov 2022 – Dec 2024

- Built 50+ REST APIs (Spring Boot, MySQL) and the Inventory, CostSheet, and Booking modules for a real-estate CRM, streamlining sales workflows and reducing manual errors.

EDUCATION

Indian Institute of Technology (IIT) Gandhinagar Gandhinagar, Gujarat
Bachelor of Technology (B.Tech) in Mechanical Engineering Jul 2018 – Jun 2022

TECHNICAL SKILLS

Languages: Java, Golang, Python, TypeScript, JavaScript, C++

AI & LLM: Agentic systems (custom agent-as-tool + LangGraph/LangChain), LLM APIs (Claude, OpenAI, Gemini, DeepSeek), RAG (pgvector), prompt caching, context management, SSE streaming

ML & Data: LightGBM, scikit-learn, sentence-transformers, pandas, NumPy

Frameworks: Spring Boot, Spring Security, Spring WebFlux, FastAPI, React.js, JPA, JDBC, jOOQ

Databases: PostgreSQL, MySQL, MongoDB, Redis, ClickHouse, InfluxDB, pgvector

Cloud & DevOps: AWS, Oracle Cloud (OCI), Docker, Git, CI/CD, RabbitMQ, Grafana, observability, distributed systems

Security: RBAC, SSO, OAuth 2.0, JWT