Archit Keshav Gangal

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Summary

- Technology consultant and software engineer with 6+ years of experience across enterprise environments in insurance, finance, QSR, and IT services, with hands-on exposure to full-stack development, system integrations, and product delivery.
- Professional experience supporting and contributing to Java-based enterprise applications, Kafka-driven event pipelines, and REST APIs, using tools like Jenkins, GitHub, IntelliJ, Postman, and observability platforms including Datadog, Splunk, Grafana, and Kibana.
- Developed AI-powered applications including a RAG-based literature review system (LlamaIndex, Chroma, Ollama, React) and a database optimization CLI tool (Python, multi-DB), demonstrating applied skills in modern AI application development.
- Hands-on experience with data engineering using PySpark, batch ETL pipelines, and cloud-compatible data workflows (AWS Glue, Databricks).
- Authorized to work in the USA on STEM OPT for up to 3 years.

Technical Skills

Languages:	Python, Java, SQL, JavaScript, Shell Scripting
Web & UI Technologies:	React.js, HTML5, XML, REST APIs, Microservices
Backend & Frameworks:	Flask, FastAPI, Django, Spring Boot (exposure), API Development
AI & Data:	LlamaIndex, Chroma, Ollama, BGE Embeddings, RAG Architectures, PySpark, Databricks, AWS Glue, Pandas, ETL Pipelines
Databases:	PostgreSQL, MySQL, MongoDB, SQLite, Snowflake, SQL Server
Cloud & DevOps:	AWS (EC2, S3, RDS, Lambda), Docker, Jenkins, GitHub Actions
Monitoring & Observability:	Datadog, Splunk, Kibana, Grafana
Version Control & Tools:	Git, GitHub, JIRA, Confluence, Postman, IntelliJ, Swagger
Messaging & Streaming:	Apache Kafka (exposure)
Operating Systems:	macOS, Windows, Linux (Ubuntu, CentOS)
Methodologies:	Agile (Scrum, Kanban), Waterfall

Professional Experience

Allstate Insurance **Aug 2022 – Jul 2024**

IT Consultant — Software Engineer XP

- Contributed to a Java-based enterprise product team, performing code changes for user onboarding workflows and Kafka queue management, working within a distributed microservices architecture built on Spring Boot.
- Reviewed and modified Java and Spring Boot application code, worked directly with Kafka topics and queues, tested REST APIs using Postman, and managed development tasks and defect tracking through JIRA.
- Deployed and managed applications on Pivotal Cloud Foundry (PCF), supporting application lifecycle management including deployments, scaling, and environment configuration across cloud-hosted services.
- Participated in major incident management by attending war rooms and bridge calls during production outages, coordinating between application, infrastructure, and business teams to drive resolution and minimize downtime.
- Contributed to Root Cause Analysis (RCA) documentation post-incident, identifying failure patterns and supporting the implementation of preventive measures.
- Monitored application health and proactively escalated alerts using Datadog, Splunk, Kibana, and Grafana, supporting production stability across critical insurance platforms.
- Supported CI/CD workflows using Jenkins and GitHub, and collaborated in an Agile environment through sprint planning, daily standups, and retrospectives.

Capgemini **Mar 2021 – Aug 2022**

Solutions Consultant

- Served as a technical consultant for a US-based QSR client (Tropical Smoothie Cafe), advising on operational stability and delivering IT solutions to ensure continuity of business-critical systems in a 24x7 environment.
- Managed end-to-end incident lifecycle using ServiceNow and JIRA, consulting with client stakeholders to prioritize issues, define resolution strategies, and maintain SLA compliance.
- Led Root Cause Analysis (RCA) for major incidents, delivering structured post-incident reports with failure analysis and preventive recommendations to client leadership.
- Coordinated between vendor and client teams to assess, plan, and execute change requests, ensuring alignment on risk, impact, and rollback strategies throughout the change management lifecycle.
- Developed and maintained runbooks and SOPs that standardized support procedures across the engagement, improving team consistency and reducing resolution time for recurring issues.
- Onboarded and mentored new team members on client systems, escalation workflows, and consulting best practices, contributing to team capability and delivery quality.
- Automated repetitive operational tasks using Shell scripting and leveraged SQL for data analysis and client-facing reporting, delivering insights that supported operational decision-making.

Genpact **May 2018 – Feb 2021**
Process Developer
- Consulted on credit operations for US-based automotive clients (Nissan and Infiniti), advising on back-office processing workflows and ensuring accuracy, compliance, and operational efficiency across credit functions.
- Transitioned into an onsite infrastructure consulting role, providing technical guidance and hands-on data center support, maintaining server availability and resolving escalated infrastructure issues for the client environment.
- Managed end-to-end incident and service request lifecycles using ServiceNow and JIRA, working closely with client stakeholders to prioritize issues, define resolution approaches, and ensure SLA adherence across operational and infrastructure domains.
- Acted as a primary point of contact for US-based client teams, gathering technical and business requirements, communicating issue status, and delivering operational reports that supported client decision-making in a global delivery model.
- Leveraged Excel and SQL to process, validate, and analyze operational data, translating findings into structured insights and recommendations for client stakeholders.

Education

Colorado State University, Fort Collins, Colorado **Aug 2024 – Dec 2025**
Master's in Computer Information Systems (Major) - Concentration: Business Intelligence, Project Management
- Awarded 2nd place in Computer Science Department Hackathon for developing an AI-powered research paper classification system using Ollama3, integrating machine learning models with a React-based chatbot interface to analyze and provide intelligent insights on health research papers.
- Maintained 3.9 GPA with A+ grades in both AI/ML courses, demonstrating strong academic performance in artificial intelligence and machine learning coursework.

Projects

DBLens – Database Optimization CLI — GitHub — Deep Wiki **Feb 2026**
- Architected and published an open-source Python CLI tool that surfaces actionable optimization insights — slow queries, missing indexes, table bloat, cache pressure, and lock contention — across PostgreSQL, MySQL, MongoDB, SQLite, and Snowflake.
- Designed a pluggable connector architecture decoupling database-specific diagnostics from a generic analysis engine, enabling new database support to be added with a single file and zero changes to core logic.
- Implemented a severity-scored findings system (CRITICAL / WARNING / INFO) with plain-English recommendations, delivering both Rich terminal output and structured JSON for integration with monitoring pipelines and CI checks.

Airbnb Data Pipeline (PySpark, Batch ETL) — GitHub **Jan 2026**
- Built an end-to-end batch ETL pipeline using PySpark to ingest, clean, transform, and aggregate large-scale Airbnb listings and guest review datasets into analytics-ready output using both the DataFrame API and Spark SQL.
- Developed custom UDFs for sentiment scoring on unstructured review text, enabling downstream analysis of guest satisfaction trends by neighborhood and property type.
- Optimized job execution through partition tuning and predicate pushdown, structuring final output as partitioned datasets compatible with Databricks and AWS Glue environments.

AI-Powered Literature Review System (RAG, Local LLM Stack) — GitHub **Nov 2025 – Dec 2025**
- Designed and implemented a Retrieval-Augmented Generation (RAG) system to enable professors and researchers to standardize, query, and synthesize academic literature from a local corpus of research papers.
- Built a React-based user interface that translated a technically complex RAG backend into an intuitive, user-facing workflow for day-to-day literature review tasks.
- Integrated the frontend with a fully local AI stack using LlamaIndex for ingestion/orchestration, Chroma for vector storage, BGE embeddings for retrieval, and Ollama (Gemma 3:4B) for inference.
- Ensured source-grounded, interpretable responses by anchoring model outputs to retrieved document context, minimizing hallucinations in unstructured academic data.
- Collaborated with faculty to refine retrieval accuracy, output transparency, and usability, contributing to an ongoing prototype targeted for institutional adoption within the CIS department.

AI CFO - Live Demo — GitHub — Deep Wiki **Sep 2025 – Oct 2025**
- Designed and developed an AI-powered CFO platform using React and a Python + PHP backend, architected as a distributed system leveraging efficient data structures and algorithms for financial forecasting, anomaly detection, and real-time analytics; built secure APIs, role-based access controls, and interactive dashboards, and contributed reusable components and utilities to open-source repositories.
- Architected and implemented a scalable distributed data ingestion and processing pipeline using Python and PHP, applying optimized data structures and algorithms to parse, validate, and normalize large Excel and CSV datasets; enabled AI-driven KPI dashboards and operational insights via a responsive web interface, while contributing ingestion modules and documentation to open-source projects.

ETL REST API **Aug 2022 – Jul 2024**
- Designed and deployed a high-performance REST API supporting over 1M daily transactions, reducing operational overhead by 38% and improving data access for 100+ users.
- Automated and optimized ETL workflows with real-time third-party API integrations, cutting manual processing by 43%, improving response times by 27%, and lowering server resource usage by 19%.