

Vinay M Gandhi

Enterprise Integration Lead | AI Solution Builder | Generative AI & Agentic AI Practitioner

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Professional Summary

- 19+ years of experience in leading, designing, and developing enterprise-scale technology solutions across distributed systems, integration architecture, cloud-native platforms, microservices, and digital transformation
- Hands-on builder of production-grade agentic AI systems using Retrieval-Augmented Generation (RAG), Model Context Protocol (MCP), and provider-agnostic LLM architectures (Claude, Gemini, Ollama) and AI agent
- Deep enterprise integration foundation — Spring Boot, Kafka, Kubernetes, SAP, TIBCO — uniquely positioning AI solutions for real-world legacy and hybrid enterprise environments
- Developing GenAI solutions and open-source contributions (GitHub) centered on RAG pipelines, agentic workflows, and practical adoption of large language models (vinayai.in)
- Strong track record of technical leadership, solution architecture, stakeholder management, and end-to-end delivery of mission-critical digital transformation programs

Career Highlights

- 19+ years of Enterprise Integration and AI Solution Builder experience
- Architected and built production RAG, MCP, AI Agents integrated with Claude, Gemini, and Ollama
- Led modernization of 250+ integration services from TIBCO to Spring Boot
- Architected event-driven integration platforms connecting 100+ enterprise systems
- Designed and developed an Enterprise Knowledge Intelligence Platform (RAG) and an AI-powered Incident Intelligence / RCA automation platform
- Led and mentored engineering teams of up to 12 developers

Core Competencies

AI & GenAI

- LLMs (Anthropic Claude, Google Gemini, Ollama) — Prompt Engineering, Provider-Agnostic Architecture
- Retrieval-Augmented Generation (RAG), Semantic Search, Hybrid Retrieval (Vector + BM25)
- AI Agents — LangChain
- Model Context Protocol (MCP) — MCP Server & Tool Development
- Vector Databases — ChromaDB, Oracle 23c AI Vector Search
- Synthetic Data Generation (CTGAN)
- AI Automation & Incident Intelligence

Architecture & Integration

- Enterprise Architecture
- Microservices Architecture
- Event-Driven Architecture
- API Strategy & Governance
- Enterprise Integration
- Cloud Native Solutions — Kubernetes, Docker

Data & Messaging

- Apache Kafka
- ETL / ELT, Data Pipelines, Data Integration

Leadership

- Technical Leadership & Team Mentoring
- Stakeholder Management
- Program Delivery

Professional Experience

Company Transfers: *Location: Navi Mumbai*

- **Jio Platform Ltd** – 01 Mar 2020 – Present
- **Reliance Digital Platform & Project Services Ltd** – 01 Sep 2019 – 29 Feb 2020
- **Reliance Corp IT Park Ltd** – 01 Apr 2011 – 08 Aug 2019
- **Reliance Infosolution** – 27 Jul 2007 – 31 Mar 2011

Role Progression:

- **Lead - Enterprise Integration Software Development** - 01 Sep 2021 – Present
- **Business Analyst EIM** - 09 Jan 2017 – 31 Aug 2021
- **Exec 1 (AppMgmt – Non SAP)** - 01 Apr 2014 – 08 Jan 2017
- **Specialist** - 01 Apr 2012 – 31 Mar 2014
- **Sr Associates** – 01 Apr 2010 – 31 Mar 2012
- **Developer** – 27 Jul 2007 – 31 Mar 2010

Technical Skills

- LLM & GenAI: LLM, Python, LangChain, Model Context Protocol (MCP), Anthropic Claude, Google Gemini AI, Ollama, RAG, Semantic Search, ChromaDB, Oracle 23c AI Vector Search, CTGAN
- Integration: Spring Boot, Kafka, TIBCO BW, REST APIs, SOAP / Web Services, Event-Driven Architecture, Message Brokers, SAP Integration, Microservices, EDA, API-led Connectivity, ESB, ETL / ELT
- Cloud & Containers: Kubernetes, Docker
- Databases: Oracle, MySQL, SQL Server
- Languages: Python, Java, C#, ASP.NET

Key Projects

❖ CVE Intelligence Platform | vinayai.in/cveintel

- Production-grade vulnerability intelligence platform with AI assistant & RAG (Personal Project)
- Architected and deployed an end-to-end CVE intelligence platform that continuously ingests the global CVE corpus, keeps data fresh via scheduled delta updates, and enables natural-language querying grounded in real vulnerability data
- Built an autonomous delta ingestion agent (APScheduler) that pulls incremental updates from the official CVEProject GitHub every 3 hours and performs idempotent UPSERTs into MySQL with full run observability
- Implemented vectorless RAG retrieval using MySQL FULLTEXT search + BM25 re-ranking for accurate, lightweight semantic retrieval without requiring a dedicated vector database
- Designed a pluggable multi-LLM layer (Strategy pattern) supporting Ollama (local), Claude, and Gemini, switchable via a single environment variable
- Added stateful per-user conversation memory with source citations, full JWT + bcrypt authentication, and role-based access control (public / user / admin)
- Delivered a modern full-stack application using FastAPI, MySQL, Jinja2 + Tailwind CSS with clean architecture and separation of concerns

❖ **Enterprise Knowledge Intelligence Platform (RAG System)**

- Architected and developed a production-ready RAG platform that converts unstructured enterprise documents into an intelligent, searchable knowledge system with grounded Q&A and full source attribution
- Designed a hybrid retrieval architecture combining semantic vector search (ChromaDB + sentence-transformers) and keyword search (BM25) with configurable Reciprocal Rank Fusion for higher relevance
- Built a robust document ingestion pipeline supporting PDF, DOCX, PPTX, XLSX, Markdown, and other formats, featuring semantic chunking, SHA-256 change detection, table preservation, and extraction of images/diagrams as retrievable assets
- Implemented a provider-agnostic LLM layer with Anthropic Claude (default) for grounded response generation and Ollama as an offline/on-prem fallback, switchable via configuration
- Delivered multimodal knowledge retrieval that preserves tables, diagrams, and images alongside text, enabling the UI to render visual context with each answer for improved explainability
- Added enterprise-grade features including structured logging with correlation IDs, chunk-level provenance tracking, path-traversal protections, and a RAG evaluation harness (retrieval metrics + LLM-as-judge)
- Exposed the system via FastAPI with Streamlit chat UI and container-friendly design for flexible cloud or on-premises deployment

❖ **AI-Powered Enterprise Root Cause Analysis & Azure DevOps Bug Automation Platform**

- Architected and developed an AI-powered production support platform that automatically analyzes exceptions, identifies root causes, and manages the full incident lifecycle across enterprise integration systems
- Built intelligent diagnostics workflows capable of parsing and analyzing Java, Spring Boot, Kafka, SAP, Oracle, REST, SOAP, and Kubernetes exceptions to pinpoint failure points and impacted components
- Integrated with Azure DevOps repositories to retrieve relevant source code snippets and leveraged Google Gemini AI for automated Root Cause Analysis, technical explanations, impact assessment, remediation recommendations, and preventive actions
- Generated executive-grade HTML incident reports featuring severity classification, confidence scores, collapsible stack traces, syntax-highlighted code, and AI-driven recommendations
- Automated Azure DevOps bug creation, assignment, and attachment of RCA reports, significantly reducing manual effort in incident triage and tracking
- Implemented intelligent exception fingerprinting (normalization + stack-trace signature hashing) to detect duplicates and prevent redundant bug creation

❖ **Enterprise Integration — Open-Source Stack**

- Spearheaded migration of monolithic ERP integrations to a microservices architecture, reducing system latency and improving maintainability
- Architected Kafka-based event-driven integration layers, enabling seamless interoperability across 100+ enterprise system
- Led TIBCO to Spring Boot migration for 250+ legacy services, enhancing scalability and reducing operational costs. Ensure seamless migration of SOAP & REST APIs, SAP connectors, database integrations, and file transfers.
- Developed custom ETL pipelines to integrate non-ERP data with ERP, improving process automation and data visibility
- Containerized deployments using Kubernetes and Docker, cutting deployment time
- Mentored 12 engineers on Spring Boot best practices, fostering a high-performance team culture

❖ **Enterprise Integration — TIBCO Stack**

- Designed and delivered a high-throughput TIBCO EMS messaging architecture, supporting reliable integrations for ERP and legacy systems

- Defined reusable messaging patterns, ensuring compliance with enterprise IT governance and reducing integration time
- Developed custom ETL workflows to streamline data exchange between heterogeneous systems, enhancing data accuracy
- Led end-to-end project delivery, from requirements gathering to production deployment, achieving 100% on-time delivery
- Collaborated with cross-functional stakeholders to align integrations with business objectives, improving operational efficiency

❖ **Human Capital Management System (HCMIS)**

- Architected a real-time HR dashboard to visualize employee KPIs, including attrition, recruitment, and payroll trends, improving leadership decision-making
- Implemented MVC architecture to ensure modular, maintainable code, reducing technical debt
- Integrated disparate HR data sources using custom ETL scripts, enabling unified workforce reporting across 5 systems
- Delivered interactive dashboards tailored to executive needs, increasing stakeholder satisfaction and adoption rates
- Mentored a team of 6 developers on .NET best practices, enhancing code quality and team productivity

Education

- Masters of Computer Applications (MCA) (Jul 2004 – Jun 2007) from Department of Computer Science & Technology, Sardar Patel University, Vidya Nagar, Gujarat
- Bachelors of Computer Applications (BCA) (Jul 2001 – Jun 2004) from South Gujarat University, Gujarat

Certifications

- Google Advanced Data Analytics Professional Certificate
- Google Data Analytics Professional Certificate
- Code Basics: Deep Learning — Beginner to Advanced