




# JAYANT NEHRA

## Applied AI & Data Engineer

+91-9461541630 | nj.nehra@gmail.com | Sikar, Rajasthan, India

 [github.com/Jay-Nehra](https://github.com/Jay-Nehra) |  [linkedin.com/in/jayant-nehra](https://linkedin.com/in/jayant-nehra) |  [medium.com/@jayantnehra18](https://medium.com/@jayantnehra18)

### ABOUT ME

---

Applied AI and Data Engineer with 5+ years of experience building production-grade AI systems and data pipelines, with recent focus on LLM-based applications. Strong background in Python, SQL, Databricks, and AWS, with hands-on experience across data curation, embedding pipelines, model evaluation, RAG, and agentic workflows. Proven ability to work closely with product and domain experts to translate evolving business logic into scalable, maintainable AI systems, combining technical leadership with hands-on execution.

### WORK EXPERIENCE

---

#### Applied AI Engineer — KornFerry (Contract Position)

Mar 2025 - Present

*Remote*

- **Rebuilt the end-to-end job standardization pipeline** (training, inference, and post-processing) used to map external job data to an evolving internal job architecture, improving robustness across multiple production products.
- **Led large-scale training data cleanup and validation**, identifying and correcting ~40% noisy or inconsistent historical mappings, increasing Top-5 prediction accuracy from 68% to 92% and significantly stabilizing model behavior.
- **Designed and maintained a Databricks-based ML data platform**, supporting automated workflows for data preparation, model training, evaluation, versioning, and deployment.
- **Built a configuration-driven embedding model evaluation framework**, enabling repeatable benchmarking across clustering, classification, and retrieval tasks, with automated metrics, reports, and visual comparisons to support quarterly research and model selection.
- **Improved search performance across two products**, reducing end-to-end latency from ~2 minutes to sub-second responses through pipeline optimization and retrieval tuning, with ongoing focus on relevance improvements.
- **Led Agentic AI initiatives for workflow automation**, designing and implementing MCP servers and AI agents that orchestrate actions across internal APIs, enabling natural-language driven, human-in-the-loop business workflows.
- **Defined observability and evaluation standards for AI systems**, covering model quality, data drift, and pipeline reliability to support production monitoring and iterative improvement.
- **Technologies:** Python, Databricks, Polars, AWS (Bedrock AgentCore), FastAPI, Elasticsearch, MCP, Langchain, Strands Agent SDK, Arize AI, ML data pipelines, embedding models, agentic workflows.

#### Technical Lead — FiftyFive Technologies

Aug 2022 - Mar 2025

*Remote*

- **Led end-to-end AI and data projects** spanning data platforms, LLM-based applications, and client-facing AI integrations, working closely with founders, product teams, and external clients.
- **Built and maintained analytical data platforms on Google BigQuery**, developing data marts and Looker Studio dashboards to support rapid feature iteration, client reporting, and business analytics use cases.
- **Designed and deployed multiple LLM-powered applications**, including natural-language-to-SQL analytics assistants, domain-specific chatbots, and document-driven AI systems, enabling users to interact with structured and unstructured data through conversational interfaces.
- **Implemented RAG pipelines and vector-based retrieval systems** using LangChain and LlamaIndex, grounding model responses in proprietary datasets and improving factual accuracy and response relevance across applications.
- **Managed large-scale unstructured text datasets** by building cleaning, templating, and deduplication pipelines, reducing storage footprint by 55% and improving data retrieval performance by 20%.
- **Led dataset curation and synthetic data generation efforts** for multilingual and domain-specific LLM training, supporting model development targeted at Asian language markets.
- **Transitioned into a technical leadership role**, owning solution architecture, effort estimation, and delivery for multiple concurrent AI projects, while mentoring engineers and acting as the primary technical point of contact for clients.
- **Technologies:** Python, SQL, Google BigQuery, Looker Studio, LangChain, Vector Databases, LLM APIs, RAG, Data Warehousing, Unstructured Data Processing, AI Application Architecture.

Senior Software Developer — Prodapt

Jun 2021 - Aug 2022

Remote

- **Developed and deployed backend microservices** for a network assurance and monitoring platform, supporting automated customer onboarding and service integration workflows.
- **Worked on real-time data ingestion pipelines** using Kafka and Apache Pulsar to support event-driven processing during onboarding and system integration.
- **Implemented graph-based data modeling using Neo4j** to represent and analyze network topology relationships within the assurance platform.
- **Deployed monitoring and observability dashboards with Grafana**, improving visibility into system health and reducing incident resolution time.
- **Containerized services using Kubernetes**, contributing to improved scalability, deployment consistency, and operational reliability.
- **Technologies:** Microservices, Kafka, Apache Pulsar, Neo4j, Kubernetes, Grafana, Backend Development, Event-Driven Systems.

System Analyst — Amdocs

May 2014 - May 2015

Pune, MH

- **Supported phased migration of a large telecom service database** to an upgraded Oracle platform, working as part of a structured, multi-stage migration program.
- **Assisted in data validation and schema verification** using Informatica and SQL, identifying missing, duplicated, or inconsistent records during post-migration checks.
- **Developed Python and shell scripts** to automate data quality checks after batch processing, helping reduce migration-related data errors and improve recovery workflows.
- **Participated in production support during scheduled migration windows**, monitoring data integrity and coordinating issue resolution with senior engineers.
- **Technologies:** Oracle Database, Informatica, SQL, Python, Bash, Data Validation, Batch Processing.

EDUCATION

MS, Artificial Intelligence — Warsaw University of Technology, Poland	2020
BTech, Computer Engineering — Sardar Vallabhbhai National Institute of Technology, Surat	2014

SKILLS

<b>Primary Languages:</b> Python   SQL
<b>Applied AI &amp; LLM Systems:</b> OpenAI API   LangChain   Agentic AI   RAG   Embeddings   Model Evaluation   MCP   Arize AI
<b>Data Platforms &amp; Warehousing:</b> Databricks   Google BigQuery   Snowflake
<b>Cloud &amp; AI Platforms:</b> AWS (Bedrock AgentCore, Lambda, S3, DynamoDB, SNS, SQS)   Azure AI Services
<b>Data Processing &amp; Pipelines:</b> Pandas   Polars   ELT   Data Pipelines   dlt
<b>Databases &amp; Search:</b> PostgreSQL   Oracle Database   ElasticSearch   Vector Databases   Neo4j
<b>Backend &amp; APIs:</b> FastAPI   API Development   Microservices
<b>DevOps &amp; Systems:</b> Docker   GitHub Actions   Git   Linux

CERTIFICATION

- **Microsoft Certified: Azure AI Engineer Associate**  
[View Certification](#)
- **Data Engineering by DeepLearning.AI (AWS)**  
[View Certification](#)