Akhilesh Santosh Jadhav

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PROFESSIONAL SUMMARY

- Certified Data Engineer with 3+ years of expertise in architecting scalable data pipelines, distributed systems, and cloud-native solutions (AWS, Azure, GCP) utilizing data modeling, schema design, data warehousing, and ETL/ELT processes.
- Skilled in orchestrating batch and real-time analytics using Apache Spark, Hadoop, Kafka, Flink, and Airflow, with a focus on performance tuning, SQL optimization, and robust data quality frameworks.
- Proficient in DevOps and automation with Docker, Kubernetes, Terraform, and CI/CD practices, driving agile project management, cross-functional collaboration, and stakeholder communication to deliver actionable, data-driven insights.

WORK EXPERIENCE

Syracuse University Syracuse, NY

Software Engineer - Data

Jun 2024 – Present

- Architected LLM-powered natural language query system leveraging GCP's Vertex AI and BigQuery, transforming data request latency from 24h to 5min capable of serving 100+ staff across 5+ departments.
- Orchestrated end-to-end data quality framework using Airflow/Terraform for distributed processing of 50K+ records, automating data governance and reducing monitoring overhead.
- Engineered microservices-based analytics platform with FastAPI/Streamlit, achieving 90% accuracy in natural language to SQL transformations and enabling real-time data visualization for cross-functional teams.

PTC Boston, MA

Data Engineer

Jul 2023 – May 2024

- Optimized data integration of Windchill PLM and ThingWorx IoT systems using AWS (S3, Glue), Apache Kafka, and Spark, helping achieve 40% faster product development cycles.
- Developed Kafka connectors in Scala for data ingestion, implementing incremental loading that improved data freshness from daily to real-time updates.
- Constructed stream processing pipelines using Spark, AWS Glue and Postgres, reducing average processing latency to under 5 seconds for complex event processing with 8:1 data compression.
- Implemented monitoring dashboards using CloudWatch and custom metrics, enabling automated alerts that reduced incident response time by 50% across 3 geographic regions.

Sigma Infosolutions Ltd.

Bangalore, IN

Data Engineer

Jun 2020 – Jul 2022

- Spearheaded a centralized schema registry using Spring Boot and Azure SQL Database to manage 25+ database schemas across 8 micro-services, improving deployment speed by 30%.
- Established CDC aggregation system using Azure Data Factory and Event Hubs to process 100K+ daily events from Azure SQL, PostgreSQL, and Cosmos DB databases.
- Crafted comprehensive monitoring dashboards in Power BI for 3 critical ETL pipelines processing 50GB monthly data, implementing real-time KPI tracking reducing mean time to resolution (MTTR) from 2 hours to 30 minutes.
- Designed dbt models for pipeline performance monitoring, creating 15+ KPIs to track system utilization, processing times, and error rates, enabling data-driven decisions to enhance pipeline reliability.

CERTIFICATIONS

- AWS Certified Data Engineer [Credentials]
- Databricks Fundamentals Academy Accreditation [Credentials]
- Microsoft Technology Associate Python [Credentials]

TECHNICAL SKILLS

Programming Languages: Python, Java, Scala, SQL, R, Bash/Shell Scripting

Cloud Platforms: AWS (EC2, S3, EMR, Redshift, Glue, Lambda), Azure (Data Lake, Synapse, Data Factory), GCP (BigQuery, Dataflow, Pub/Sub, Cloud Storage)

 $\textbf{Big Data \& Distributed Systems:} \ \ \textbf{Apache Hadoop (HDFS, MapReduce), Spark, Flink, Storm, Kafka, Pulsar}$

Databases: MySQL, PostgreSQL, SQL Server, MongoDB, Cassandra, DynamoDB, Snowflake, cosmosDB

Devops & Integration: Git, GitHub, Bitbucket, Jenkins, Docker, Kubernetes, Terraform, Airflow, NiFi, Talend, Alteryx

Data Modeling & Architecture: Data Warehousing, Data Lakes, ETL/ELT, Data Pipeline Architecture, Data Mesh, Schema Design

BI & Visualization: Tableau, Power BI, Looker

EDUCATION

Syracuse University Syracuse, NY

Master of Science in Computer Science

Vishwakarma Institute of Technology

Pune, IN