PRASANNA KUMAR R

Azure Data Engineer
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PROFILE

Azure Data Engineer with 4+ years of experience in Azure Data Factory (ADF), ADLS Gen2, Azure SynapseAnalytics, Azure SQL Database and Azure Databricks (PySpark) within Banking and Investment Banking domains. Experienced in building scalable ETL/ELT pipelines, implementing incremental data loading strategies, optimizing warehouse performance, configuring ADF triggers (Schedule, Tumbling, Event-based), managing Azure & Self-hosted Integration Runtime, and delivering secure analytics-ready datasets for Power BI teams.

PROFESSIONAL EXPERIENCE

Secova Solutions

Senior Software Engineer / Azure Data Engineer

Frost Bank (Texas, USA) - Investment Banking 01/2024 – Present

Project 1

• Designed scalable Azure Data Factory (ADF) pipelines to ingest high-volume financial data into Azure Data Lake Storage (ADLS Gen2).
• Configured Azure Integration Runtime (IR) and Self-Hosted IR for secure hybrid connectivity between on-premise and cloud systems.
• Developed end to end ETL pipelines in azure data factory (ADF) to extract data From multiple source systems perform transformations using databricks (Pyspark), And load curated data into ADLS gen2 and azure synapse analytics.
• Developed Schedule, Tumbling Window, and Event-based triggers for end-to-end pipeline orchestration.
• Integrated Azure Databricks (PySpark) for data transformation, aggregation, and business rule implementation.
• Implemented watermark-based incremental load logic, reducing pipeline runtime by approximately 30%.
• Designed Star Schema data models in Azure Synapse Analytics for analytical reporting.
• Optimized T-SQL queries, indexing strategies, and stored procedures to improve performance.
• Built metadata-driven and parameterized reusable pipelines for scalable data processing.
• Implemented logging, monitoring, and alerting using Azure Monitor and Log Analytics.
• Ensured data security using Azure RBAC, Managed Identities, data masking, and encryption techniques.
• Designed and maintained data ingestion frameworks for loading structured and semi-structured data into ADLS Gen2.

Simmons Bank (USA) – Banking 08/2021-2023

Project 2

• Worked on on-premise to Azure cloud migration project using Azure Data Factory (ADF) to modernize legacy data warehouse systems.
• Designed and implemented staging and curated layers in Azure Data Lake Storage (ADLS Gen2) to organise raw and processed data efficiently.
• Developed ETL pipelines in ADF to extract data from SQL Server and other on-premise sources and load it into Azure cloud environment.
• Implemented full load and incremental load mechanisms using watermark logic to ensure accurate and efficient data migration.
• Built parameterized and reusable ADF pipelines using dynamic content and expressions to handle multiple source tables.
• Performed source-to-target data validation and reconciliation to ensure data accuracy, completeness, and consistency after migration.
• Developed T-SQL queries, views, and basic transformation logic to support reporting and downstream analytics requirements.
• Assisted in integrating Azure Data bricks (PySpark) for performing data cleansing, transformation, and aggregation tasks.
• Supported the creation of structured and curated datasets for Power BI reporting and business analysis.
• Improved data load performance by implementing parallel execution, pipeline optimization techniques, and efficient query design in ADF.

SKILLS

Azure Data Factory (ADF), ETL/ELT Pipelines, Data Migration
ADLS Gen2, Azure Synapse Analytics, Azure SQL Database, Azure Blob Storage, Azure Data-bricks, PySpark, Python
SQL Server, T-SQL, Query Optimization, Performance Tuning, Data Modelling, Azure DevOps, CI/CD Pipelines, Git, Azure Monitor, Log Analytics
Power BI (Working Knowledge), Analytics Dataset Preparation, Azure RBAC, Managed Identities, Secure Integration Runtime
Agile – Scrum, Production Support, Incident & Change Management

EDUCATION

Computer Science and Engineering,
Bachelor of Engineering (B.E) – Anna University
2017 – 2021
Chennai, India

Declaration

I hereby declare that the above-mentioned information is true and correct to the best of my knowledge and belief.