MADDALA DEEPAK

MICROSOFT FABRIC DATA ENGINEER

📍 **Bengaluru**   ✉️ **maddala.d30@gmail.com**   📍 **6362764315**

PROFILE INFO

Microsoft Fabric **Data Engineer** with **3+ years** of expertise in designing, implementing, and maintaining data solutions using Microsoft Fabric services. Proven track record in data lake house architecture, real-time analytics, and data pipeline optimization. Strong background in retail and banking data management with hands-on experience in **Power BI, Synapse Analytics, and Azure Data Factory.**

WORK EXPERIENCE

- **Data Engineer, AL ML Labs Pvt. Ltd – Sep 2023 to Nov 2025**
- **Project Engineer, Wipro Technologies – Mar 2023 to Sep 2023**
- **Intern, Wipro Technologies – Mar 2022 to Jul 2022**

- Designed and implemented scalable data lakehouse architectures on Microsoft Fabric and Azure Data Lake Storage Gen2 to support enterprise-wide analytics and reporting.
- Developed ETL/ELT pipelines using Azure Data Factory and Databricks, processing large volumes of structured and unstructured data with Python, SQL, and PySpark.
- Built real-time streaming data solutions leveraging Microsoft Fabric and Azure Stream Analytics, enabling sub-second data processing for critical business operations.
- Established data quality and governance frameworks using Microsoft Purview, ensuring lineage tracking, metadata management, compliance, and data integrity.
- Integrated machine learning models into production pipelines with Databricks and Fabric Data Science, implementing MLOps workflows for training, validation, and deployment.
- Optimized data processing performance through query tuning, indexing strategies, and resource scaling in Azure Synapse and Databricks.
- Delivered interactive Power BI dashboards and self-service analytics solutions, empowering business users with actionable insights.
- Managed and optimized Azure cloud infrastructure (compute clusters, storage, networking), implementing security best practices and cost-control strategies.
- Mentored and led cross-functional teams on Microsoft Fabric best practices, conducting knowledge-sharing and technical training sessions.
- Authored comprehensive documentation (architecture diagrams, data dictionaries, runbooks) ensuring compliance with industry standards and regulatory requirements.

SKILLS

Microsoft Fabric & Azure Services
- **Microsoft Fabric:** Data Engineering, Data Science, Real-time Analytics, Data Factory
- **Azure Synapse Analytics:** Dedicated SQL Pools, Serverless SQL Pools, Spark Pools
- **Azure Data Factory:** Data Pipelines, Data Flows, Integration Runtime, Data Orchestration
- **Azure Databricks:** Apache Spark, MLflow, Delta Lake, Collaborative Notebooks
- **Azure Data Lake Storage Gen2:** Data Lakehouse Architecture, Delta Lake, Parquet
- **Power BI:** Report Development, Data Modeling, DAX, Power Query

Programming & Tools
- **Languages:** Python, SQL, PySpark, Scala, PowerShell
- **Data Processing:** Apache Spark, Delta Lake, Parquet, JSON, Avro
- **Version Control:** Git, Azure DevOps
- **Cloud Platforms:** Microsoft Azure, Azure Active Directory

EDUCATION

• Bachelor of Technology (CSE) From Audisankara College Of Engineering And Technology **2018 - 2022**

PROJECTS

Project 1: Cloud Data Pipeline Development
Description:
Designed and implemented a cloud-based data pipeline using Azure Data Factory, Databricks, and Synapse Analytics. Integrated data from SQL Server, REST APIs, and Blob Storage into ADLS for real-time and batch processing, optimized workflows with PySpark and Delta Lake, and automated deployments using Azure DevOps.

Roles & Responsibilities:
- Designed and implemented data ingestion pipelines using Azure Data Factory (ADF) and Databricks
- Developed PySpark scripts to transform raw data into structured formats
- Integrated data from multiple sources (on-premises SQL Server, REST APIs, Blob Storage) into ADLS
- Optimized data processing using partitioning, bucketing, and Delta Lake
- Created CI/CD pipelines using Azure DevOps to automate deployment
- Ensured data security and compliance using RBAC, encryption, and managed identities
- Optimized queries and performed performance tuning in Azure Synapse Analytics

Tools & Technologies:
Python, PySpark, Azure Data Factory, Azure Data Lake Storage Gen2, Azure Databricks, SQL Server

Project 2: Retail Customer Analytics Platform
Description:
Designed and implemented a scalable customer analytics platform using Microsoft Fabric, Delta Lake, and Power BI, integrating data from multiple retail sources into a unified lakehouse architecture. Built automated pipelines to process and transform large-scale customer data in near real time, ensuring high performance and reliability. Delivered executive dashboards that provided actionable insights into customer lifetime value, purchasing trends, and engagement patterns.

Roles & Responsibilities:
- Built comprehensive customer analytics platform using Microsoft Fabric
- Implemented real-time customer segmentation and recommendation engine
- Processed 10+ million customer records daily with 99.9% uptime
- Created executive dashboards showing customer lifetime value and purchase patterns

Tools & Technologies:
Microsoft Fabric, Power BI, Delta Lake

Project 3: Banking Risk Management System
Description:
Built a high-performance banking risk management platform using Microsoft Fabric, Azure Synapse, and Python to process large volumes of financial data in real time. The solution delivered actionable insights into credit and transaction risks, enabling rapid, data-driven decisions, enhancing fraud prevention, and improving operational efficiency and regulatory compliance.

Roles & Responsibilities:
- Developed real-time fraud detection system using Microsoft Fabric
- Implemented machine learning models for credit risk assessment
- Built automated alerting system for suspicious transactions
- Achieved 95% accuracy in fraud detection with sub-second response times

Tools & Technologies:
Microsoft Fabric, Azure Synapse, Python