

EDUCATION

College of Engineering Trivandrum

Trivandrum

B. Tech Electrical and Electronics Engineering GPA: 9.13

July 2019 - July 2023

Work Experience

UST
Data Engineer
April 2024 - Present

- Microsoft Certified Data Engineer with experience in designing and implementing scalable and reusable solutions for data migration, validation, transformation, and loading.
- Skilled in using Azure Data Factory, Microsoft Fabric, Python, PySpark, and SQL to build efficient data pipelines and optimize workflows. Proficient in Power BI for developing interactive dashboards and reports that support business decision-making.
- Works closely with teams to define data strategies, automate workflows, and troubleshoot pipeline issues for better efficiency and accuracy.
- Experience in integrating Generative AI solutions into ETL processes to enhance data processing, transformation, and decision-making capabilities.

SKILLS

Programming Languages: Python, SQL, C++, Pyspark, DAX

Technologies: Microsoft Fabric, Power BI, Azure Data Factory Databases: MS SQL, MySQL, PostgreSQL, Snowflake

Projects

Data Conversion Framework Python, Pyspark, PostgreSQL, Power BI

Developed a standalone Python-based solution for data transformation, designed to be configurable, reusable, and scalable for handling complex transformations. Utilized PostgreSQL as the underlying storage and PySpark for efficient data processing and transformation. Implemented audit logging and process status tracking, enabling users to monitor data pipelines in Power BI. Designed a split file processing mechanism to handle large-scale data loads, improving processing efficiency and scalability.

Historical Data Migration (ORC to Microsoft Fabric) Microsoft Fabric, SQL, Pyspark

Developed a Metadata-Driven Integration (MDDI) Framework using Microsoft Fabric to integrate data from Oracle Recruitment Cloud (ORC) into a medallion architecture comprising bronze, silver, and gold layers. Created a Recipe JSON generator from an Excel template to generate metadata. Designed and implemented a Process Master Pipeline to read landing files, execute PySpark notebooks for validations and transformations, and store outputs as Parquet files in the Bronze lakehouse. Executed stored procedures in the gold warehouse for advanced data processing and maintained an audit log to track and update process statuses for end-to-end transparency.

LSTM Forecasting for Nano Grids' Energy Demand Python, Keras, scikit-learn

Developed LSTM forecasting model to predict hourly PV generation and load demand in nanogrids as part of the final year project 'P2P Energy Sharing Algorithm for Islanded Nanogrids'. Integrated model seamlessly into project framework, providing real-time predictions directly integrated into project outcomes. Achieved impressive R-squared (R2) score of 0.92, affirming high accuracy in forecasting energy variables. Demonstrated proficiency in machine learning and data analysis, offering practical solutions for sustainable energy management.

Business Insights Dashboard Power BI, SQL, Excel, DAX Studio [Dashboard]

Developed and maintained a comprehensive Power BI dashboard by integrating sales data from CSV files and SQL databases, ensuring seamless data integration and quality assurance through an efficient ETL process. Created DAX measures and performed data modeling to meet specific business requirements and generate actionable insights. Designed a multi-view dashboard catering to five departments (Finance, Supply Chain, Sales, Marketing, and Executive), streamlining report management. Developed key performance indicators (KPIs) including Net Profit, Gross Margin, Total Sales, and Cost of Goods Sold (COGS) to aid data-driven decision-making.

CERTIFICATIONS

Microsoft Certified: Azure Data Engineer Associate DP 203 [Credentials]

Jan 2025- Jan 2026