

# NISANTH TUMU

Data Engineer/Cloud Data Engineer

+1 (249) 688 2395 | nisanthtumu9@gmail.com  
Peterborough, ON | Canada  
<https://www.linkedin.com/in/nisanth-t-486a4b192/>

## Skills

- Microsoft Azure Data Engineering (ADLSGen2, Data Factory, Databricks, Synapse Analytics)
- Microsoft Power BI, Tableau
- SQL (SQL Server, MySQL)
- Microsoft Fabric (One Lake, Data Factory, DataFlowGen2, Data Engineering, Data Warehousing).
- Python (Pandas, NumPy, SciPy, Matplotlib)

## Projects

### Azure Data Engineering Project With E-Com Data

- Setting up Azure Data Factory • Configuring ADLS Gen2 storage • Understanding Medallion Architecture • Implementing data ingestion • HTTP endpoints (GitHub) • SQL Tables • Creating your first data pipeline • Real-world implementation scenarios • Performance optimization techniques • Azure Databricks implementation • Data transformation techniques • MongoDB integration for data enrichment • Synapse Analytics setup • Visualization with Power BI/Tableau/Fabric • Performance optimization.

### Azure Data Engineering Project with Netflix Data

- Azure Data Architecture • Data Understanding • Azure Data Fundamentals • Azure Data Factory • ETL Pipelines with ADF • ADF Real Time Scenarios • Databricks Unity Catalog • Databricks Spark Cluster • Incremental Loading with Autoloader • Spark Streaming • Data Ingestion using PySpark • Parameters using Databricks Utilities • Data Orchestration with Databricks Workflows • Data Transformation using PySpark • Big Data Analytics with Apache Spark • Databricks Delta Live Tables • End to End Pipeline in Databricks.

### Azure Databricks Project

- Data Understanding • Creating Azure Resources • Databricks Overview • Unity Catalog • Data Ingestion • Autoloader with parquet files • Spark Structured Streaming • ETL Jobs • PySpark Functions • Python OOP with PySpark • PySpark Advanced Functions • Slowly Changing Dimension • Delta Live Tables • Star Schema • Databricks End-To-End Pipeline.

### Azure Data Factory Project

- Create Azure resources • Azure Data Lake (ADLSGen2) • Create ADF Workspace • Dataset and Linked Service • Data Ingestion in Data Lake • Copy Activity • Copy Data Using REST API • Get Metadata Activity • IF Condition • For Each Activity • Expression Builder • Parameterized Pipeline • Data Flow • Data Transformation • Schedule Trigger • Set Variable Activity • Storage Event Trigger • Real Time Scenarios • Delete Activity • Debugging Pipeline • Execute Pipeline Activity • End-To-End Data Pipeline.

### Azure Data Warehousing Project

- Creating Synapse Analytics Resource • ETL Pipelines • Incremental Data Loading • Data Transformation using PySpark Data Flows • Serverless SQL Datawarehouse • External Data Sources • Openrowset() Function • External Tables in Synapse • Schema Handling • End-To-End Data Pipeline • Dimensional Data Modeling • STAR schema vs SNOWFLAKE schema • Creating Dimension Tables using CETAS • Creating Fact Table • STAR schema • Slowly Changing Dimensions.

### Basic Azure Data Engineering Project

- Data Understanding (API) • Creating Azure Resources • Azure Data Lake Gen2 • Data Ingestion (Bronze Layer) • ETL Pipelines with ADF • Real-Time Scenarios with ADF with parameterization • Databricks Cluster & Overview • Service Principle • Data Transformation • Apache Spark (Silver Layer) • Pyspark for advanced transformations. • Big Data Analytics with Pyspark • Azure Synapse Analytics (Gold Layer) • Openrowset() function • External Tables in Synapse • Integrate Data Warehouse with PBI.

## Work Experience

**Systems Engineer** – Infosys PVT Limited – Hyderabad, India

August 2021 - August 2023

- Collaborated with Business Analysts to analyze, design, and test CRM applications.
- Conducted quality assurance tests to optimize integration of data to warehouse and performance.
- Improved data migration accuracy for CRM systems, reducing errors significantly.

## Education

**MASTER OF SCIENCE IN BIG DATA ANALYTICS** – Trent University – Peterborough  
Majors: Big Data Analytics (GPA: 3.8/4)

September 2023 - December 2024