

Aspiring Data Science professional seeking opportunities to apply expertise in delivering data-driven solutions across healthcare, business, and service domains. Skilled in predictive modeling, statistical analysis, and data visualization to support strategic decision-making. Proficient in Python, SQL, and scalable workflows with exposure to Azure and Databricks. Built a strong foundation through published medical data science research, Elsevier contributions, and practical projects such as ChronicCare, Drive Rescue, and RoomSync. Recognized at a national hackathon for creating an impactful food donation app, with a proven ability to translate complex datasets into actionable insights.

#### Primary skills:

Azure Data Factory, Data Warehouse, Azure s3 Blob Storage, Azure Synapse, Azure Devops, DataBricks, DataLake, Bigdatatools, MySQL, SQL server, Excel

**Libraries:** Numpy, Scikit-Learn, TensorFlow, Matplotlib

#### Machine Learning:

Supervised & Unsupervised Learning, Model Evaluation, MIFlows, Feature Engineering

#### Secondary Skills:

Python, PySpark, SQL, PowerBI(DAX), RDBMS, ETL.

#### EDUCATION:

2021-2025

#### B.Tech - Artificial Intelligence And Data Science

(Karpaga Vinayaga College Of Engineering and Technology, Chennai)

CGPA: 7.6

#### CERTIFICATE COURSE

Azure Data Engineering

#### Internship Experience

##### Data Engineer – Boston Nex Tech, Chennai

(MAY 2025 - SEPT 2025)

- Designed and maintained ETL pipelines using IBM DataStage, Azure Data Factory (ADF), and Azure Databricks, integrating structured and unstructured data from multiple sources into Azure Data Lake Storage and Azure Synapse Analytics.
- Implemented Azure Delta Lake architecture for schema evolution, faster queries, and scalable storage.
- Built real-time streaming pipelines and automated data validation checks in Azure Databricks (PySpark). Utilized Azure DevOps for CI/CD automation, deployment of data pipelines, version control, and release management.

##### Environment:

- Azure Cloud: Azure Data Lake, Azure Synapse Analytics, Azure Databricks, Azure Devops, Azure Data Factory, Azure Kubernetes Service
- Reporting & Visualization: Power BI Service
- Programming & Data Processing: Python, SQL, PySpark

##### Bussiness Analyst – Prowesstics, Chennai

(JUL 2023 – AUG 2023)

- Designed and developed ETL pipelines for ingesting structured/unstructured data from diverse sources (APIs, SQL databases, flat files) into Azure Data Lake Storage and Azure Synapse Analytics.
- Performed data preprocessing, cleansing, and validation using Python, SQL, and PySpark in Azure Databricks to ensure high-quality datasets for analytics.
- Built and optimized data transformation workflows in Azure Databricks, applying partitioning, caching, and Spark optimization techniques to reduce processing time.
- Created interactive dashboards and reports in Power BI (integrated with Azure services) for business users, delivering insights on operations, performance metrics, and forecasting.
- Implemented data quality checks, exception handling, and error logging within Azure Data Factory pipelines to monitor workflows and improve reliability. Applied Azure DevOps to automate CI/CD workflows, ensure smooth deployment of data pipelines, maintain version consistency, and optimize release cycles.

##### Environment:

- Azure Cloud (Azure Data Lake, Azure Synapse, Azure Databricks, Azure Data Factory, Azure Devops)
- Power BI Service (for reporting and dashboards)
- Programming environment: Python, SQL, PySpark

## PERSONAL DETAILS

Nationality: Indian

## ADDRESS

445 G type-1 Quatres  
Block-29 Neyveli-7  
607807, Cuddalore,  
TamilNadu

## Project Experience:

### 1. Real-Time Sensor Failure Prediction (Manufacturing Analytics)

Built end-to-end ETL and real-time streaming pipelines in Azure Data Factory (ADF) and Azure Databricks (PySpark) to ingest wafer sensor data, design scalable data models in Azure Data Lake Storage, implement predictive ML pipelines for equipment failure forecasting, and visualize insights in Power BI.

### 2. Insurance Data Lake & Claims Processing

- Designed a Data Lake architecture on Azure to consolidate structured and unstructured insurance data (claims, policies, customer documents).
- Created data ingestion pipelines using ADF and Databricks for batch and streaming data.
- Implemented data quality checks, schema validation, and lineage tracking for compliance.
- Built curated Delta Lake tables optimized for query performance in Databricks SQL, reducing processing latency by 30%.

### 3. Retail Sales Data Warehouse & Analytics

- Developed ETL workflows to extract data from on-prem SQL Server, transform in Databricks (PySpark), and load into Azure Synapse Analytics.
- Applied incremental data loading and partitioning strategies to optimize refresh times.
- Built semantic models and connected Power BI for sales forecasting and trend analysis.
- Enabled stakeholders to access interactive dashboards with KPIs on sales, inventory, and regional performance.

### 4. Healthcare Data Integration for ChronicCare App

- Coordinated with healthcare professionals to identify critical patient metrics (vital signs, treatment adherence, and progress tracking).
- Designed a patient insight framework where multimodal health data (numerical + text) was standardized for easy interpretation.
- Facilitated interactive dashboards that provided doctors and management with trends in patient health, enabling better resource allocation and service planning.
- Presented findings to stakeholders, focusing on how predictive insights could improve patient retention and engagement.

### 5. Food Donation Analytics Platform (Hackathon Project)

- Collaborated with NGOs, donors, and logistics teams to identify gaps in food distribution.
- Designed a structured framework to track donations, NGO requests, and logistics operations.
- Streamlined donor-NGO matching process using data-driven insights to reduce delays.
- Developed reporting dashboards to provide management with visibility on food availability and NGO demand trends.
- Supported management in making better decisions on resource allocation and CSR initiatives.