# Akash Nath

# Data Engineer

github.com/akashn1 | in linkedin.com/in/akashnath1/

### Skills

Languages: Python, SQL.

**Technologies & Tools:** Azure, Azure Data Factory, Data Ingestion, Data Warehousing, Databricks, Synapse Analytics, Delta Lake, Spark, PySpark, Hadoop, Hive, Pandas, ETL, Data Pipeline, Data Visualization, Power BI, Tableau, Mage, BigQuery, GIT, CI/CD.

Soft Skills: Problem Solving, Effective Communication, Team Collaboration, Adaptability, Attention to Detail.

# Work Experience

TCS, Bhubaneswar Aug 2022 - Present

#### System Engineer

- Energy Analytics Platform UK Energy Major: Created multiple ETL pipelines using ADF, Databricks (PySpark), and Delta Lake to calculate energy demand and production quantities from different sources like wind, solar, traditional grids etc. This pipelines enabled near real-time insights via Power BI, reducing data lag by 45% and supporting informed grid decisions.
- Cloud Data Migration Enterprise Project: Worked on migration project, from legacy systems to Azure SQL and ADLS using ADF and Python. Delivered 99.9% data accuracy and ensured zero downtime during go-live.
- Executive Dashboard Power BI: Built intuitive dashboards integrating data sources. Empowered teams with selfserve reporting and cut manual reporting effort by 60%.
- ADE, ADB, ADF, Power-BI, Databricks, ETL, Python, SQL, Pyspark, Database, Deltalake, Pandas.

#### Assistant System Engineer

- · Managed the ETL pipeline's data quality by leading the testing efforts using PySpark notebooks. I developed and applied thorough testing processes across several notebooks to ensure data integrity and reliability throughout its lifecycle.
- · Azure, Synapse, Python, SQL, Pyspark, Pandas.

#### Education

## Heritage Institute Of Technology, Kolkata

B.tech. in Civil Engineering

Relevant Coursework: Object Oriented Programming, Databases, Reasoning, DBMS, SQL

## Gomati District Polytechnic, Udaipur-Tripura

Diploma in Civil Engineering

Relevant Coursework: Python, Communication and Presentation Skills

Jun 2014 -Jul 2017 CGPA: 7.2/10

Aug 2017 - Aug 2020

CGPA: 7.2/10

# Project Work

- Cloud Migration: Developed an end-to-end pipeline to ingest SQL Server data to Azure Data Lake using ADF, later used that data to transform it with Databricks, and visualize insights via Power BI and Synapse Analytics.
- Energy Demand Forecasting: Built scalable ETL pipelines and real-time data processing workflows using Azure and Databricks to collect and analyze energy data for accurate demand prediction and forecasting.
- Olympic Data Analysis: Implemented an end-to-end ETL pipeline to analyze 2015 Olympic data using Azure Data Factory, Data Lake Gen 2, Synapse Analytics, and Azure Databricks. Enabled different performance metrics of athletes to support coaching decisions.
- Stock Portfolio Dashboard: Built a real-time Power BI dashboard using data from Grow and Google Sheets to track my investments and key performance metrics.
- Uber Data Analysis: Created an end-to-end data pipeline on GCP with Mage, BigQuery, and Looker Studio to analyze Uber trip data. Helped identify peak demand areas and optimize driver allocation to improve service efficiency.

## Certificates

- · Microsoft Certified Azure Data Engineer Associate, Microsoft.
- Databricks Lakehouse Fundamentals certification, Databricks
- Data Engineering and Data Visualization Curriculum, ievolve.