ONLINE COURSE

ForumDE
Code your career

MASTER AZURE DATA ENGINEERING

WITH JOB ASSISTANCE

WHAT WE OFFER?

- Azure Databricks
- Azure Data Lake
- Azure Data Factory
- Azure SQL Database
- PySpark
- Azure Key Vault
- Azure Logic Apps
- Azure DevOps

MR. ARUN KUMAR
Ex-TCS, Ex-Tredence
Ex-Harman, Ex-WNS

REGISTER NOW

Visit Our Website
https://forumde.in/

+91 78709 70617

ONLY AT
₹19,999/-

AZURE DATA ENGINEERING SYLLABUS

ForumDE
WE RISE BY LIFTING OTHERS

ETL CONCEPT

- Lake house Concept
- Data Warehouse Concept
- Difference between Database, Data Warehouse and Lake house?
- OLAP vs OLTP systems Concept
- Fact Table and Dimension Table
- Data Modeling-Star Schema vs Snowflake Schema Concept

SPARK

- Architecture of Spark
- Job, Stages and Task in Spark
- Pyspark concepts
- Spark SQL concepts
- Transformation and Action
- Lineage

- Lazy Evaluation
- rdd vs dataframe vs dataset
- Immutability Concept
- operations on RDD
- operations on dataframe
- Difference file formats like parquet, avro, orc and their differences
- Understanding Shuffling in Spark
- Narrow Transformation
- Wide Transformation
- Accumulator
- Broadcast variable
- Partition By
- repartition and coalesce
- partition pruning
- cache vs persist
- User Defined Functions(UDF)

AZURE

- Furnishing basic information about services of Azure with perspective of Data Engineering and how it is used in industry and real time scenario.

AZURE DATABRICKS

ForumDE
WE RISE BY LIFTING OTHERS

- Clusters
- Widgets
- Databricks CLI overview
- Service Principal
- Mount Point
- JDBC connection with Azure SQL Server
- Read and write data in Azure Databricks
- Data processing in Azure Databricks
- Introductory notebooks
- Working with Dataframes in Azure Databricks
- Working with different types of file formats like CSV, Parquet, Delta, Avro
- dbutils commands
- Databricks Runtime
- Concept of Delta Table
- Get started with Delta Lake
- Time Travel in Delta Lake
- Schema Enforcement and Schema Evolution
- MERGE statement
- Ingest data into Data Lake
- Table batch reads and writes
- Table delete, update, and merge
- Handling Bad Records
- Scheduling jobs in Databricks Notebook
- Medallion architecture

AZURE DATA LAKE GEN2 (ADLSGEN2)

- How to provision ADLS Gen2
- Theoretical concept of Storage Azure Data Lake Gen2
- How do we store data in ADLS Gen2
- How to read/write data in ADLS Gen2 from databricks
- Hot, Cold, Cool and Archive Access Tiers
- Difference between ADLS Gen2 vs ADLS Gen1 vs Blob Storage
- ZRS,LRS,GRS,GZRS

AZURE DATA FACTORY (ADF)

- Pipelines
- Activities
- Datasets
- Linked Services
- Integration Runtimes
- Auto Resolve Infrastructure Runtime
- Self Hosted Infrastructure Runtime(SHIR)
- SSIS Infrastructure Runtime
- Pipeline Run
- Scheduling and Trigger of pipeline
- Parameters
- Variables
- Orchestration of Pipeline in ADF
- Triggers
- Schedule Trigger and its System Variables
- Event Based Trigger and its System Variables
- Tumbling Widow Trigger and its System Variables
- Data Flow Pipeline
- Pipeline Level Parameters
- Global Parameters
- Creating Dynamic Pipeline creation
- How to monitor ADF data pipelines?
- ARM Template
- Copy one table from My SQL (on-premise) to Azure SQL Server.
- Copy filtered data of one table from My SQL (on-premise) to Azure SQL Server.
- Copy All tables from My SQL Server(on-premise) to Azure SQL Server
- Copy selected tables from My SQL Server(on-premise) to Azure SQL Server
- Pipeline for Incremental Load
- Copy all tables from Azure SQL Database to ADLS Gen2
- Copy selected tables from Azure SQL Database to ADLS Gen2
- Error Logging of ADF pipelines in Azure SQL Server.

DEPLOYMENT

- Deploy Azure Databricks and Azure Data Factory pipelines using Azure DevOps.

ForumDE
WE RISE BY LIFTING OTHERS

AZURE KEY-VAULT SERVICE

- How to securely store Keys and Password in Azure Key-Vault
- How to access Keys and Password for Azure Key-Vault
- How to connect AKV from ADF(Azure Data Factory) and read the secrets of AKV.
- How to connect AKV from ADB(Azure Databricks) and read the secrets of AKV.

AZURE LOGIC APP

- How to send mail alert for pipeline failure and success using logic app.

AZURE SQL SERVER

- Connect Azure SQL server from databricks
- Connect Azure SQL server from Azure Data Factory

SOFTWARE INSTALLATIONS

- Installation of My SQL
- Installation of SSMS and connection with Azure SQL Server
- Installation of Azure Data Studio and connection with Azure SQL Server
- Installation of Azure Storage Explorer and connection with ADLS Gen2
- Installation of Notepad++

ForumDE
WE RISE BY LIFTING OTHERS

APART FROM ABOVE COURSE DETAILS, WE WILL ALSO DELIVER BELOW: -

- In addition to this we will do one end to end data pipeline on Azure using all the major components of Azure using Python as programming language.
- We will guide you what kind of questions can be asked in interview.
- We will help you in building your resume.
- We will take mock interview to prepare you for real time interview.

BATCH DETAILS:

Classroom video recording will be provided to all the candidates till **1 year** from the date of course completion.

Sharing of videos to another person is strictly prohibited.

Contact us For Admission or Queries: -

+91 78709 70617

+91 98018 30173