SUDHIR SINGH

Summary

Specialised in Apache Spark with 3.6 years of expertise in designing and delivering Big Data ingestion workflow and DevOps CI/CD pipelines on Azure Cloud to numerous clients across the globe. Additionally, Mentored 60+ working professionals in SQL over a period of 4 months.

SKILLS

- Transactional DBMS: Microsoft SQL Server, MySQL, PostgreSQL
- Distributed Storage System: ADLS, Amazon S3
- Big Data Processing & Streaming: Apache Spark, Apache Kafka
- Data Orchestration: Apache Airflow, Azure Data Factory
- Data Processing: Python, PySpark API, SparkSQL API, Pandas, SpaCy, NLP
- Data Warehousing: Snowflake, BigQuery, Redshift
- Machine Learning: Scikit-learn, TensorFlow, Keras, Seaborn, Matplotlib, NumPy, SciPy
- DevOps: Azure DevOps, Splunk, Kubernetes, Kubeflow, Jenkins, JFrog, Docker, GIT

WORK EXPERIENCE

Tiger AnalyticsData Engineer

Remote

Jan 2023 - Present

- Migrated and processed 10 PetaBytes of data into Azure Data Lake Storage as a part of the Common Data Foundation, streamlining the data foundation layer for improved accessibility and efficiency, resulting in a more robust data ecosystem.
- Engineered & Delivered a metadata-driven, object-oriented PySpark Data Ingestion framework paired with Azure DevOps CI/CD pipelines that empowered automated deployment of client configuration changes, reducing re-development needs by 90% and minimizing further operational cost.

Tech Mahindra

Sydney, Australia Jan 2021 - Jan 2023

Data Engineer

- Delivered a decision support system to help technician to relocate based on forecasted ticket numbers before, backed up by Machine Learning model deployment and prediction, leading to 95% improvement in ETA estimation.
- Ingested Billions of customer data into cloud Hortonworks based Data Ingestion framework.
- Led the establishment of 3+ ML CI/CD pipelines on AWS using Kubernetes, Jenkins, and GitHub, resulting in improved deployment processes and increased productivity for the team.
- Conducted comprehensive training sessions for 60 employees on SQL Analytics, data modeling techniques, and building scalable data pipelines using PySpark and Apache Airflow.

EDUCATION

• Liverpool John Moores University
Master of Science in Machine Learning & AI

Liverpool, UK Graduation Date: Sep 2025

• Gautam Buddha University
Bachelor of Technology in Information Technology

Greater Noida, UP Graduation Date: Jul 2021

ACHIEVEMENTS

• Tech Mahindra / Bravo Award - Project Delivery

Jun 2021 & Mar 2022

• Tech Mahindra / Pat On The Back Award - Trained 50+ new employees

Dec 2021

CERTIFICATIONS

• Microsoft / Azure Data Scientist Associate, DP-100 Exam

Jun 2022

• Microsoft / Azure Data Engineer Associate, DP-203 Exam

Jun 2022

Tiger Analytics, Remote

• Common Data Foundation

Jan 2024 - Present

- Developed & migrated unified foundation layer for Retail data coming from various source systems.
- Lead for delivery of data sources migration from Databricks to on-prem frameworks.
- Developed Python frameworks for data quality checks, PII encryption, and data transformation from raw to trusted and feature layers.
- Tech Stack: Azure Databricks, Python IDE based Development, API, Large Data Volume

• Launchpad

Feb 2023 - Dec 2023

- Lead the end-to-end design and development of an object-oriented PySpark-based Data Ingestion framework, increasing data processing speed by 30%.
- Built Azure DevOps CI/CD pipeline, automating 95% of deployments and accelerating timelines.
- Tech Stack: Azure DataFactory, Azure DevOps CI/CD, Databricks, Logic Apps, Log Analytics

Tech Mahindra, Sydney, Australia

• DQR-DAC Ingestion System

June 2022 - Jan 2023

- Implemented a workflow to determine customers' eligibility for migration to new strategic plans.
- Developed & maintained data ingestion layer, audit & configuration layer, Hadoop layer for seamless operational needs as per GDPR compliance.
- Transformed 25+ data sources using Scala as per business & operational requirements.
- Provided operational support in detecting any discrepancy in 25+ data sources.
- Tech Stack: Hadoop, Scala, Hive, Delta Tables, Linux, Zeppelin, Ambari, Jira, Confluence

• Pharma Insights Data Extraction & Analytics

Apr 2022 - May 2022

- Created ADF pipeline to fetch data from S3 to ADLS, using ELTL approach.
- Written Pyspark script in Azure Databricks to extract text from images.
- Categorized data retrieved into JSON objects, loaded into ADLS.
- Provided analytics insight report using Azure Databricks & presented it to clients.
- Tech Stack: SQL, Python, PySpark, Azure Data Factory, Data Bricks, Data Lake, Key Vault

• Decision Support For Technician Allocation

Aug 2021 - Mar 2021

- Improved end-to-end service processes & cut down manual deployment by 75% by predicting proper utilization of technicians and minimizing customer wait time for best customer experience by generating 3000 recommendations per day, in near real-time, to mitigate the risk of the day.
- **Deployed** 5+ container-based applications orchestrated with Kubernetes.
- Established 2+ CI/CD pipelines of ML models on AWS.
- Written 40+ highly optimized SQL stored procedures to transform/aggregate raw data,
 API integrations to fetch live data.
- Tech Stack: Python, SQL, ML, CI/CD, AWS, Kubernetes, JFrog, Jenkins, Kubeflow

• Control Tower Intrusion Detection Analytics

Jan 2021 - July 2021

- Worked closely with stakeholders, BA, & scrum masters to gather the business requirements.
- Extracted complex Fields from different types of Log files using Regular Expressions in Databricks.
- Exploratory data analysis to analyze security anomalies from server's generated data.
- Wrote and optimized simple and complex SQL queries to load information extracted into Splunk datasets as per business needs.
- Tech Stack: Azure Databricks, Azure Datafactory, CI/CD, Spark SQL, PySpark, Data Lake, Delta Tables